THE COMPLETE FIELD GUIDE TO BUTTERFLIES OF AUSTRALIA

MICHAEL F. BRABY

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Dedicated to Murray Upton, former Collection Manager
of the Australian National Insect Collection, for his wisdom,
practical knowledge and generous support over the years.

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MICHAEL F. BRABY

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Foreword

I can't imagine what my life would have been if I had not been introduced to butterfly collecting at a summer camp when I was 13 years old. That started me into both a lifelong hobby and a career in science. Butterflies on the whole are just as beautiful as birds but in many ways easier to study. In most cases, adults can be collected without fear of threatening the viability of populations, and they can readily be marked with felt-tipped pens, released, and recaptured so that their movements may be tracked and their population sizes estimated. Many species can be cultured easily in the laboratory. They represent one of the most important and largest groups of organisms—plant-eating insects—and because of the activities of butterfly collectors, we often know what plants they eat. Above all, butterflies are readily identified to species because of the existence of field guides, of which this book is a magnificent example.

This means that while enjoying watching or collecting Australian butterflies, you also have the opportunity to add to scientific knowledge and contribute to the preservation of biological diversity. With millions of species and billions of natural populations of plants, animals, and microbes helping to run humanity's life-support systems, there is no hope of understanding the details of the distribution and functioning of all of them. That's why scientists have chosen butterflies of one of the major 'model' systems, an important sample from the panoply of life, to study in detail*. Butterflies are one large and diverse taxonomic group that science has a chance of understanding in depth—of virtually 'completing' in the near future. As Michael Braby notes, they already serve as a surrogate for many other groups of invertebrates and small vertebrates in conservation biology. For example, places with high butterfly diversity are also likely to have rich faunas of plant-eating insects of less well-studied groups. So taking careful notes of where and when you find each species, working out in different populations exactly what plants caterpillars eat and from which flowers adults sip nectar, and recording the behaviour of both caterpillars and butterflies, is not only fun, it's important. Indeed, little or nothing is known about the life histories of some Australian species.

Some of my fondest memories, though, are just of the pleasure of knowing butterflies—of identifying beautiful and rare species in the field and, yes, enjoying adding specimens to my collection. And this guide is a perfect tool to help you to do this too!

Paul R. Ehrlich
Stanford University

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* See, for example, *Butterflies: Ecology and Evolution Taking Flight* (2003) by C. L. Boggs, W. B. Watt and P. R. Ehrlich, and *On the Wings of Checkerspots: A Model System for Population Biology* (2004) by P. R. Ehrlich and I. Hanski.

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Opposite: Warm temperate rainforest, Minnimurra Falls National Park, New South Wales.

Preface

This book aims to provide a reliable way of identifying the adult stage of all butterflies in Australia, particularly when in the field. It includes all species recorded from the Australian continent, its continental islands and outlying political territories. Of the 416 butterfly species currently recognised, 398 are known from the mainland, while a further 18 species are found only on the more distant islands administered by various Australian governments.

The Introduction gives a brief overview of adult structure, higher classification, distribution and habitats, and provides notes on the life cycle and behaviour of the six families which occur in Australia. This is followed by a short chapter on how to use this book and identify specimens.

The species descriptions, which form the main body of the book (pages 32–309), provide a brief synopsis of each species. The butterflies are presented in a systematic sequence, which reflects current views on their higher classification, although within each subfamily the order of species may not follow their strict systematic order. To help with identification, there are notes for each species under the headings: similar species, variation, adult behaviour, habitat, status, larval food plants and larval attendant ants (where relevant). These notes are supplemented with distribution maps and charts of adult flight times. In some cases, line drawings of critical structures needed for identification are included with the species photographs.

Most of the information for the species accounts has been extracted and condensed from *Butterflies of Australia: Their Identification, Biology and Distribution* published in 2000. However, the text includes a considerable amount of new information, based on papers published in both the scientific and popular literature between 1999 and 2003, as well as new unpublished information, based either on my own observations or on personal communications from colleagues. Where particular facts published in *Butterflies of Australia* have since proven to be in error or inaccurate, these have been corrected.

At the end of the book there is a checklist of the Australian butterfly fauna, a list of entomological contacts, a short glossary, a bibliography, and indexes of the common and scientific names for all Australian butterflies.

I hope this field guide will help butterfly collectors, commercial breeders, biology students and professional entomologists, as well as being of value to conservation biologists, naturalists, tourists from overseas and those with only a casual interest in entomology. I trust it will also stimulate further interest in the natural history and conservation of these insects—especially in the conservation of their habitats—and find a place on the bookshelves of anyone who may simply wish to identify a butterfly in their garden.

Michael F. Braby
Canberra 2004

Opposite: Coastal heathland, Broadwater National Park, New South Wales.

Acknowledgments

The introduction to this book relies heavily on the 1981 edition of *Butterflies of Australia* by Ian Common and the late Doug Waterhouse. I am very grateful for permission to incorporate many sections of text from that classic work into this book.

Most of specimens illustrated in this work are from the superb colour plates photographed by Dennis Crawford of Melbourne and originally published in *Butterflies of Australia: Their Identification, Biology and Distribution* in 2000. The plates have been supplemented with additional photographs prepared by the author, and I am most grateful to Ted Edwards and Vanna Rangsi (Australian National Insect Collection, Canberra) and Jan Forrest (South Australian Museum, Adelaide) for access to specimens in collections under their care; Cliff Meyer and Steve Brown also freely made available specimens in their extensive private collections. Digital images of specimens were kindly supplied by Kim Goodger and Phil Ackery (Department of Entomology, The Natural History Museum, London) and Steve Brown. Ted Edwards, Mike Couper and Peter Samson kindly provided additional images for inclusion in this book. All photographs in the introductory chapters are by the author unless otherwise indicated.

The distribution maps have been annotated from the base maps prepared by Murray Upton and published in *Butterflies of Australia*.

Andrew Atkins, David Britton, Steve Brown, Fabian Douglas, Rod Eastwood, David Lane, Russell Mayo, Cliff Meyer, Mike Moore, Chris Müller, Richard Weir, Matt Williams and Terry Woodger are thanked for clarifying or providing new information concerning the species text. Dr Don Harvey (National Museum of Natural History, Smithsonian Institution, Washington) helped with nomenclature of the higher classification of the Riodinidae, and Russell Cumming (Department of Environment) assisted with all things botanical.

I am very grateful to Nick Alexander and Murray Upton for their careful editing of the entire manuscript.

Finally, I thank my wife Lynette for her unfailing support and encouragement during the preparation of the manuscript.

Introduction

Butterflies are perhaps the best-known group of insects. Their brilliance and popularity have given them special significance and many people regard them with affection as the 'birds' of the insect world.

Australia does not have a particularly rich butterfly fauna by world standards, but nonetheless it has an interesting and unusual fauna, with nearly half of its species found nowhere else. The region also contains a number of distinctive endemic, or near endemic, groups that are crucial to our understanding of the origin and evolution of the world butterfly fauna.

It may come as a surprise to learn that Australia's unique butterfly fauna has not yet been fully documented. New species continue to be discovered, and much remains to be learnt and recorded about the distribution, life histories, larval food plants and other aspects of the biology and behaviour of particular species.

Many earlier butterfly collectors reared adults from the immature stages but few recorded their observations, often in the mistaken belief that the biology and behaviour was well understood or that their observations were too trivial. Unfortunately, this is still true today. Although our knowledge has expanded rapidly in the last few decades, we still need to know much more about the taxonomy and ecological requirements of most species if we are to adequately conserve them.

Swamp Tiger, *Danaus affinis.*

Butterflies are playing an increasingly important role in conservation biology. They act as 'flagships' for the identification and preservation of critical habitats under threat, for the conservation of biodiversity, and as convenient 'indicators' for monitoring climate change or pollution. The more threatened species have become recognised as subjects worthy of protection and conservation in their own right. The focus on butterflies as flagships for conservation has given them special significance, as 'ambassadors' for the general conservation of invertebrate biodiversity, much of which is still poorly understood. With ongoing environmental degradation and deforestation the need to recognise, document and protect the remaining biological diversity on the planet has become more urgent than ever.

Amateur or private researchers have generated much of our scientific knowledge of Australian butterflies. Indeed, about 80% of all specimens in public museum collections have come from private collections donated by hobbyists. These specimens comprise an indispensable resource and form the very basis of our understanding of butterfly taxonomy, systematics, variation, seasonality and geographic distribution. Given the current lack of knowledge, collectors and naturalists can make a valuable contribution by establishing private reference collections, studying aspects of the biology and behaviour, and rearing the immature stages. Through careful observation and accurate recording, new discoveries can be published in news bulletins or local scientific journals. In this way private researchers can make a valuable contribution to the overall knowledge of Australian butterflies, at the same time gaining a deeper and richer satisfaction from their hobby.

Adult structure

Adult butterflies, like all other insects, comprise three major divisions: head, thorax and abdomen (Fig. 1). These are usually readily distinguishable, even though most of the adults' body and appendages are covered

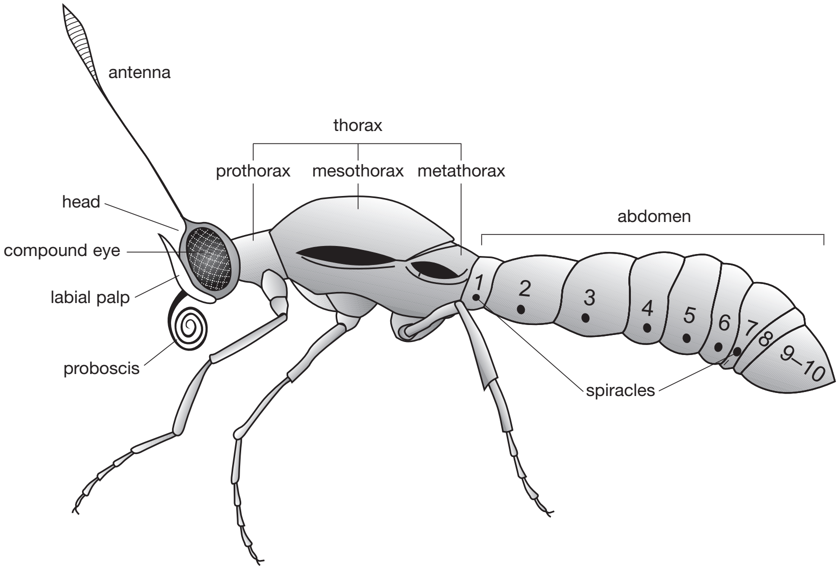


Figure 1. The main parts of the body of an adult butterfly.

with special flattened hairs or scales. The exoskeleton is made up of a series of rather rigid plates or sclerites joined by flexible membranes.

Head

The most obvious feature of the head is a pair of large compound eyes, the surface of each of which is made up of hundreds of hexagonal-shaped lenses or facets. The compound eyes enable the insect to recognise shapes, colours and movement.

Arising from between the eyes is a pair of long, three-segmented feelers or antennae. The thick basal segment of each antenna is called the scape, the smaller second segment the pedicel, and the remainder of the antenna the flagellum. In butterflies the flagellum is thickened towards its tip to form a club, the slender portion of the flagellum being called the shaft. In the Hesperiidae, the apical portion of the club tapers to form an apiculus (Fig. 2).

The mouthparts consist of a strongly coiled tongue or proboscis and a pair of upturned, three-segmented appendages or labial palps. Towards its tip the proboscis is provided with a series of small chemoreceptors. When the adult drinks the proboscis is uncoiled and extended to suck in water, nectar or other liquids.

Peter Samson

The endangered Bulloak Jewel, *Hypochrysops piceata.*

Thorax

The thorax is composed of three segments, each bearing a pair of legs. The first segment or prothorax is the smallest of the three. The much larger second and third segments or meso- and metathorax each bear a pair of membranous wings and have strong internal ridges or projections, known as apodemes, to which the stout muscles necessary to operate the wings are attached.

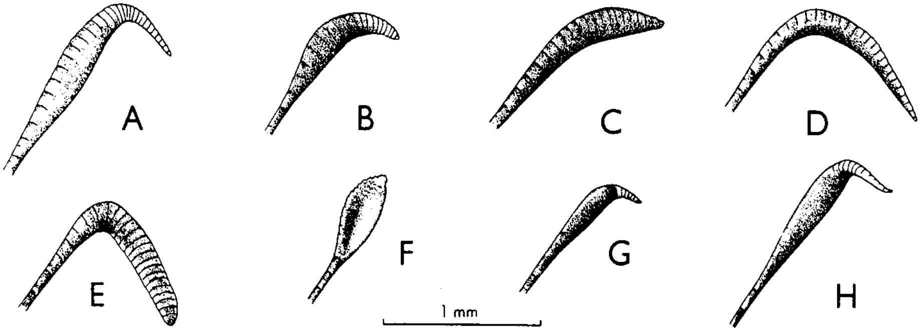


Figure 2. Antennal clubs of skippers, Hesperiidae: A, ochres, *Trapezites maheta* group; B, ochres, *Trapezites sciron* group; C, grass-skippers, *Anisynta*; D, grass-skippers, *Signeta*; E, sedge-skippers, *Motasingha*; F, grass-darts, *Taractrocera*; G, grass-darts, *Ocybadistes*; H, darters, *Telicota*.

Source: after Common and Waterhouse (1981).

Legs

The legs (Fig. 3) consist of five segments; coxa, trochanter, femur, tibia and tarsus, but the basal two segments are small and the coxae of the mid- and hind legs are rigidly attached to the thorax. The tarsi are normally five-segmented (Figs 3A, 3F, 3H), with a pair of apical claws, and usually bear chemoreceptors. The fore legs are fully developed for walking in the Hesperiidae, Papilionidae and Pieridae, but are reduced to various degrees, at least in the males, in the Nymphalidae (Figs 3C, 3E) and Lycaenidae (Fig. 3G). This reduction usually involves the loss of the terminal claws and a reduction of the tarsal segments, which may be completely fused to form one elongate segment. The fore tibia in the Hesperiidae and Papilionidae bears a movable lobe known as the epiphysis (Fig. 3A). This usually has a marginal comb of hairs or bristles thought to be used to clean the antennae and proboscis. The tibia of the mid- and hind legs usually bears a pair of apical spurs, and in some Hesperiidae the hind tibia also has a pair of median spurs. The paired tarsal claws of the mid- and hind legs are usually simple hooks, but in the Pieridae each claw is forked or bifid (Fig. 3B).

In many nymphalid and some lycaenid species, the sexes cannot be distinguished unless the legs are examined. A simple, reliable method of separating males and females is to examine closely the tarsus of the fore leg using a ×15 hand lens or microscope. In these two families, the fore leg of the female is normal but in the male the fore leg is reduced with the terminal claw absent and the tarsal segments absent or fused.

Wings

Adult butterflies have two pairs of fully developed wings. Each wing is essentially a flattened membranous sac, with the upper and lower membranes pressed closely together and strengthened by a series of tubes or veins. For descriptive purposes each fore or hind wing may be regarded as being triangular in shape (Fig. 4A). One corner of the triangle, attached to the thorax, forms the base of the wing, one the apex, and the other

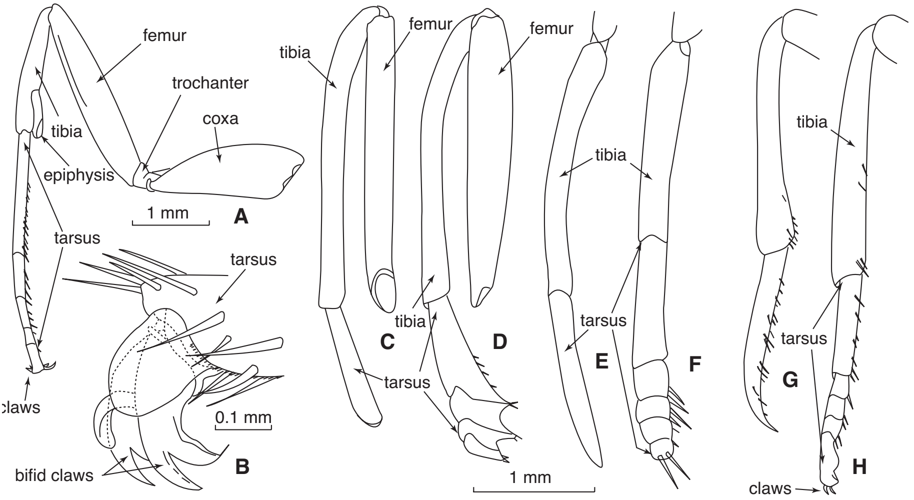


Figure 3. Structure of fore legs of adults: A, male Hesperiidae (grass-skippers, *Toxidia*); B, tarsal claws of Pieridae (jezebels, *Delias*); C, male and D, female Nymphalidae (tigers, *Danaus*); E, male and F, female Nymphalidae (nymphs, *Vanessa*); G, male and H, female Lycaenidae (hairstreaks, *Jalmenus*).
Source: after Common and Waterhouse (1981) and B. Murray.

the tornus. The leading edge of the wing running from the base to the apex is the costa; the outer edge joining the apex to the tornus is the termen; and the trailing edge running from the base to the tornus is the inner margin or dorsum. Names are also given to the main areas of the wings: basal, subbasal, submedian, median, postmedian, subterminal, terminal, subcostal, costal, subapical, apical, subtornal and tornal.

The currently accepted nomenclature of the wing veins of Lepidoptera is shown in Fig. 4B and detailed below. The costa of the fore wing is strengthened by the first main longitudinal vein or costal vein. The other veins of both fore and hind wings follow a characteristic basic pattern which includes a further five sets of longitudinal veins. These are the subcostal (Sc), radial (R), median (M), cubital (Cu) and anal veins (A). The subcostal vein is never branched in butterflies and always terminates on the costa. The radial vein is branched but the pattern differs in the fore and hind wings. In the fore wing, the radial vein has as many as five branches (R_1 to R_5) but some of these may be fused so that there are only four or even three branches. The branches of the radial vein may be separate, as in the Hesperiidae, or they may be 'stalked' and divide from one another. Sometimes R_1 is partly confluent with the subcostal vein. In the hind wing, the radial vein has only two branches, R_1 and the radial sector (Rs), but R_1 is entirely fused with Sc forming a composite vein $Sc+R_1$. The basal sections of the radial and cubital veins together with

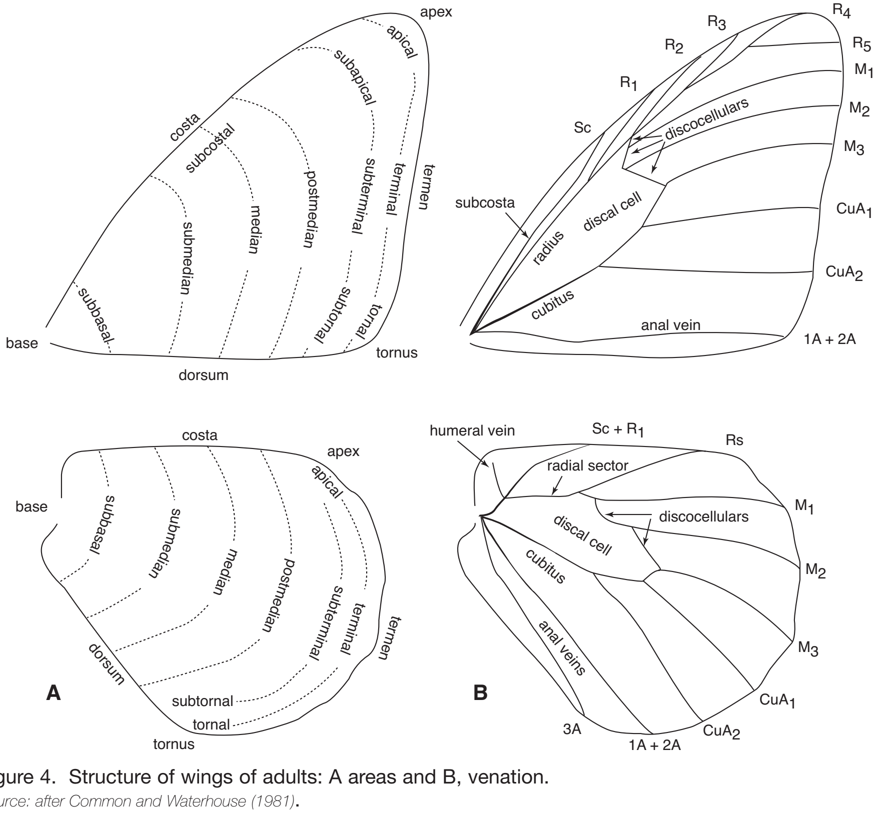


Figure 4. Structure of wings of adults: A areas and B, venation.

Source: after Common and Waterhouse (1981).

weak transverse veins or discocellulars enclose the area known as the discal cell, or simply the 'cell'. In this form the cell is said to be closed, however, if one or more of the discocellulars are absent, it is said to be open. The basal sections of the median vein have been lost in adult butterflies, and the three branches (M_1, M_2 and M_3) usually begin at the discocellulars. There are two main branches of the cubital vein, the anterior branch (CuA) and the posterior branch (CuP), but the latter has been almost entirely lost in butterflies, being found only in the fore wing of the Papilionidae. The anterior branch of the cubital vein has two further branches (CuA_1 and CuA_2). Of the three anal veins (1A, 2A

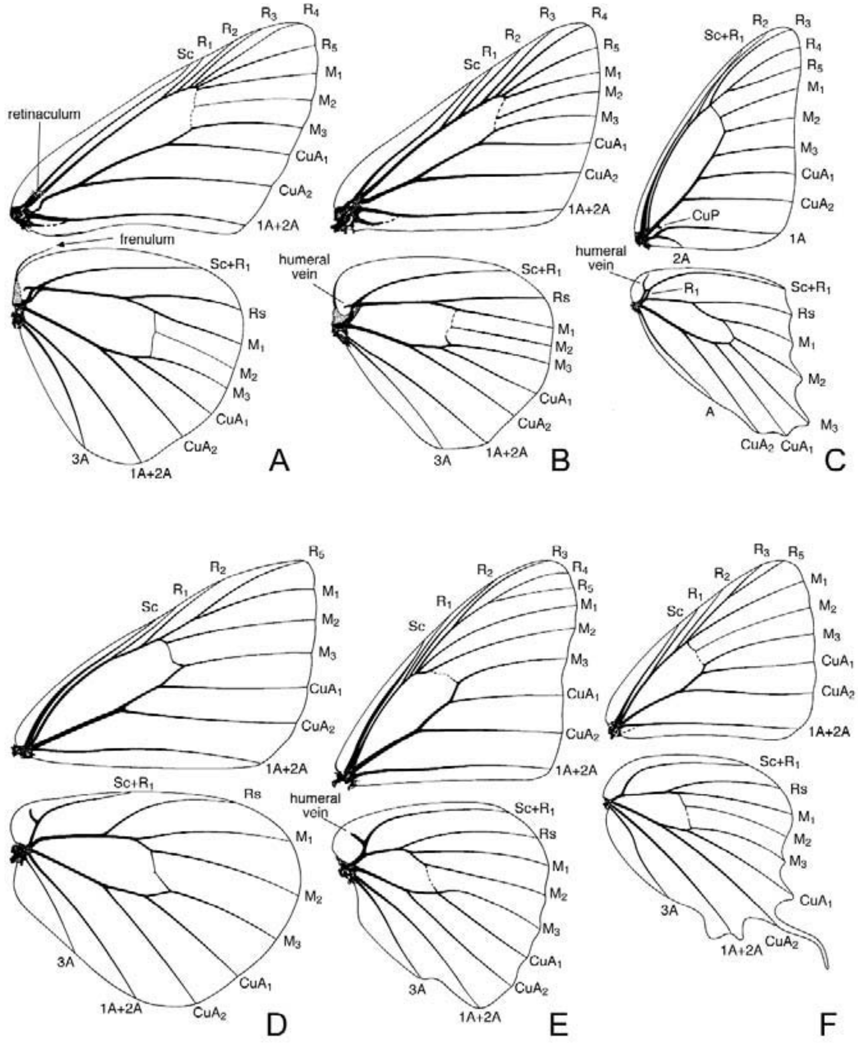
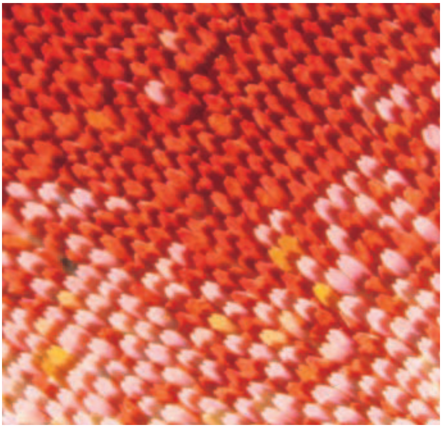


Figure 5. Wing venation of adults: A, Hesperiidae (Regent Skipper, *Euschemon rafflesia*); B, Hesperiidae (ochres, *Trapezites*); C, Papilionidae (kite swallowtails, *Graphium*); D, Pieridae (whites, *Pieris*); E, Nymphalidae (nymphs, *Vanessa*); F, Lycaenidae (hairstreaks, *Jalmenus*).

Source: modified after Nielsen and Common (1991).

and 3A), there are never more than two in butterflies, but often one of these is missing, and in the fore wing they may be either completely fused (i.e. 1A+2A) or separate for only a short distance near the base. An additional small vein, the humeral vein, is sometimes present near the base of the hind wing, running from the subcostal vein towards the basal end of the costa. Differences in wing venation between the butterfly families are shown in Figure 5.

The wing surfaces of most Lepidoptera are densely clothed with overlapping scales arising from minute sockets, which in butterflies are arranged more or less in transverse rows. The wing margins, especially between the apex and tornus, may be furnished with projecting marginal scales forming a scale-fringe. The colours of butterflies are due either to light being refracted by the physical structure of the scales or to pigments deposited in the scale wall. The colours of the scales are distributed to produce complex and beautiful patterns of bands, spots and rings. Bands may be complete, consist of a series of spots separated only by the veins, or as a broken series of spots with the constituent spots being more widely separated from one another. In addition to the normal clothing of wing scales, males of many species possess specialised sex-scales, or scent-hairs, known as androconia, which are associated with scent- or pheromone-producing glands and used during courtship. These sex-scales may terminate in a series of fine hair-like projections, and are either scattered among the normal wing scales or arranged in characteristic patches, sometimes known as sex-marks, sex-brands or scent-pouches, where they are concentrated along the costa of the fore wing or, where they are concentrated as dense tufts of long hairs, as hair-pencils. The presence of these patches of sex-scales is a useful feature for distinguishing males from females, and their shape, position and colour are a useful means of separating otherwise similar species.


Mike Coupar

Wing scales of the Scarlet Jezebel, *Delias argenthona*.

Wing venation provides important clues to the identity and relationships of most butterfly species and the main features can usually be examined without removing the wings from the specimen. If only a cursory examination is to be made the wings should be examined with a lens or dissecting microscope from the underside, while the wing is held at an oblique angle to a strong light source. The venation will stand out more strongly if the area to be examined is wetted with a drop of 70% ethyl alcohol or the scales brushed up into a vertical position.

Abdomen

The abdomen has 10 segments each of which consists of a dorsal plate or tergum and a ventral plate or sternum joined laterally by a membranous pleural area; the spiracles are found on the pleural area of the first seven segments. A thickened sternum is absent on the first segment. The last two or three segments are greatly modified to form the genitalia. In males, the ninth and tenth segments of the abdomen form the genitalia. Females have two genital openings: one opening, situated at the posterior end of the abdomen, is used for egg-laying, and the other, situated on the mid-ventral surface between the seventh and eighth sterna, is used for mating.

Higher classification

Biological classification involves the arrangement of groups of organisms into a hierarchical framework that reflects the evolutionary history of those organisms. Closely related species are classified into the same genus; related groups of genera are then classified into tribes, then families, then orders and so on. Sometimes subdivisions are made within the higher taxonomic categories, for example subtribe, subfamily, superfamily, etc. Each taxonomic category is given a standard suffix: **iti** for subtribe, **ini** for tribe, **inae** for subfamily, **idae** for family and **oidea** for superfamily.

Butterflies and moths belong to the large insect order Lepidoptera (which means scaled wings). They are distinguished from all other insects by the possession of two pairs of membranous wings clothed with overlapping scales. In Australia, there are around 10 500 scientifically named species of Lepidoptera arranged in about 30 superfamilies.

Butterflies are usually classified into two superfamilies, the Hesperioidea (generally known as skippers) and the Papilionoidea (all other butterflies). Malcolm Scoble, from the Natural History Museum in London, has provided convincing evidence that the Hedyloidea comprises a third superfamily of butterflies. The Hedyloidea are an unusual group of nocturnal butterflies from Central and South America.

The Hesperioidea and Papilionoidea are distinguished from one another by the shape of the head and antennae, and the venation of the fore wing. In the Hesperioidea, the antennae, which arise farther apart on the head, are thickened subapically with the basal portion of the club gradually thickened while the apical portion, known as the apiculus, is curved or sharply bent. In the Papilionoidea, the fore wing has the peripheral veins stalked, but not in the Hesperioidea.

The relationship of the three butterfly superfamilies to the rest of the Lepidoptera remains unclear, although the Uranioidea (swallowtail moths) and Calliduloidea (old world butterfly moths) appear to be the closest relatives. Moreover, there is no single character that will always distinguish butterflies from moths. Traditionally, butterflies have been distinguished from other Lepidoptera by their day-flying habits, bright colours, ability to close their wings dorsally over the thorax, the presence of a large humeral lobe on the hind wing, absence of a frenular wing-coupling device, and possession of clubbed antennae. However, some butterflies do not meet all of these requirements, for example, the male of the Australian Regent Skipper, *Euschemon rafflesia*, has its wings coupled together by means of a frenulum and retinaculum (Fig. 5A), a wing-coupling device found in many groups of moths, while some moths share 'butterfly' characteristics, for example, many castniids have clubbed antennae and are day-flying. Since butterflies represent only a small fraction of the Lepidoptera and belong to

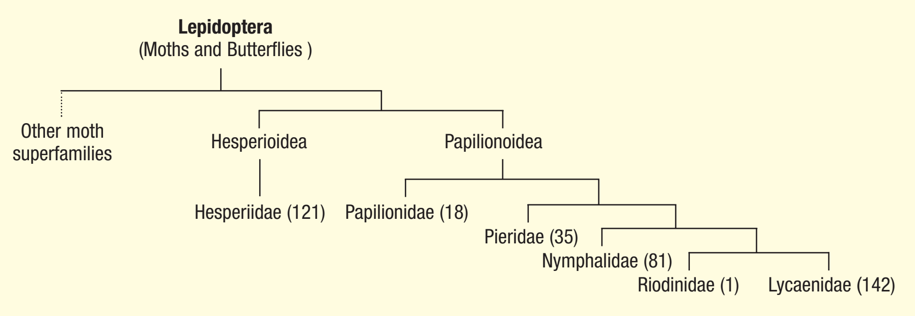


Figure 6. A simple family tree of butterfly superfamilies and familes in Australia. Numbers refer to the number of species in each family on mainland Australia.

the Suborder Glossata, series Ditrysia, which includes about 98% of all species of moths, it is probably more accurate to consider butterflies as a group of day-flying ditrysian moths!

The Hesperioidea contains a single family, the Hesperiidae, whereas the Papilionoidea is generally divided into four or five families: Papilionidae (swallowtails), Pieridae (whites and yellows), Nymphalidae (nymphalids), Riodinidae (metalmarks) and Lycaenidae (blues)(Fig. 6). All of the six families of butterflies occur in Australia and its remote islands although the proportion of species in each of these families varies greatly. In Australia, the lycaenids and hesperiids are the most numerous groups, representing two-thirds of the total number of butterfly species, whereas the papilionids, pierids and riodinids, are very poorly represented.

The checklist of the 416 species currently recognised from Australia includes 18 species from remote islands (see pages 302–309) and is arranged according to their higher classification. The higher classification of each family (i.e. subfamily, tribe, subtribe) primarily follows Evans (1949), Ackery (1984) and Vane-Wright (2003) for the Hesperiidae; Miller (1987), de Jong et al. (1996) and Ackery et al. (1999) for the Papilionidae; Braby and Pierce (in press) for the Pieridae; Vane-Wright (2003) for the Nymphalidae, including Miller (1968) for the Satyrinae and Penz and Peggie (2003) for the Heliconiinae; Vane-Wright (2003) for the Riodinidae; and Pierce et al. (2002) and Vane-Wright (2003) for the Lycaenidae.

Distribution and habitats

Butterflies are primarily a tropical group of insects and often depend on rainforest plants for larval food. They are not well adapted to arid environments of low moisture and extremes of high temperature. Hence the best place to find butterflies in Australia is in the northern, coastal areas of north-eastern Queensland where conditions of temperature, humidity and rainfall are optimal and large tracts of rainforest still remain.

Chocolate Argus, *Junonia hedonia*.

Australia is divided into five major ‘faunal provinces’—biogeographical regions based on climatic and environmental factors (Fig. 7). Within these five provinces, 314 butterfly species have been recorded from the tropical-subtropical Torresian province. In more temperate areas, 193 species have been recorded from the Bassian province and 56 species from the South-western province. In the Timorian province there are 126 species, but only 92 have been recorded from the large arid Eyrean province, which receives an annual rainfall of less than about 500 mm. Several species range into this arid area only very slightly or temporarily. Species richness is highest along the moist, eastern coast and declines rapidly west of the Great Dividing Range.

Three areas support exceptionally high numbers of species of butterflies: Cape York Peninsula; the Wet Tropics (between Cooktown and Townsville, including the Atherton Tableland, QLD); and a subtropical area in south-eastern Queensland and north-eastern New South Wales where the Bassian and Torresian faunas overlap. By far the richest part of Australia is northern Queensland where 271 species (68% of the

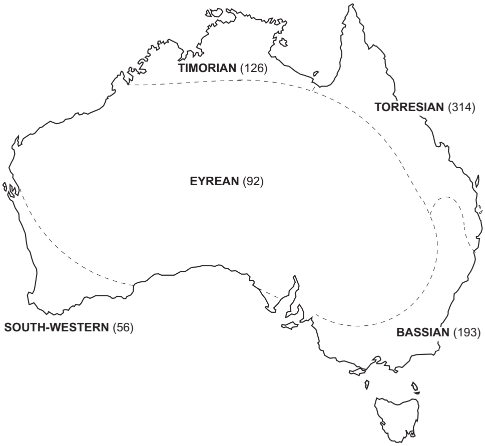


Figure 7. Major faunal provinces showing the number of butterfly species in each. *Source: C. Hunt*.

total fauna) are found north of Townsville, of which 226 occur on Cape York Peninsula north of Coen.

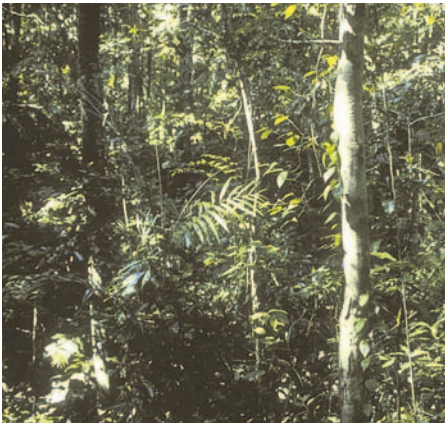
The photographs on pages 11–13 illustrate the range of habitats or natural vegetation types in Australia where butterflies typically occur. Most species make use of several or even many different habitats, but some species live in just one type of habitat, particularly those with very specialised ecological needs.

Nearly half of the butterflies (173 species) in Australia are associated with rainforest (i.e. forests with a closed canopy) and of these 114 species are found only in these habitats. Rainforest habitat types include monsoon forest (tropical semi-evergreen/semi-deciduous dry rainforest), littoral rainforest (rainforest close to the shore line), gallery forest (narrow corridors of tropical rainforest along the banks of rivers, seasonal creeks and gullies within the otherwise drier open-forests and woodlands), and the wetter evergreen rainforests such as tropical (mesophyll vine forest), subtropical (notophyll vine forest), warm temperate (microphyll fern forest) and cool temperate rainforest (nanophyll fern forest). Monsoon forests include vine forest and vine thicket, and may be semi-deciduous or deciduous depending upon annual rainfall.

A large proportion of butterflies also occur in forests dominated by various species of *Eucalyptus*, including tall open-forest (also known as wet sclerophyll forest), open-forest and woodland (both also known as dry sclerophyll forest), or in tropical-subtropical coastal habitats dominated by *Melaleuca*, known as paperbark woodland and paperbark swampland.

Butterflies also occur in tropical savannah woodland, snow gum woodland (restricted to subalpine areas, usually above 1200 m), mallee shrubland, mallee-heath and coastal/subcoastal heathland. Few species occur in mangrove, grassland or sedgeland habitats, and even fewer have adapted to the arid acacia shrublands and hummock grasslands of the inland deserts.

Some species occur in very specialised habitats not used, or rarely used, by other butterflies. For example, the Southern Sedge-darter, *Telicota eurychlora*, occurs in estuarine swamps and wetlands where the larval food plant grows in flowing brackish-water or sometimes fresh-water along creeks and small streams, while the Golden-rayed Blue, *Candalides noelkeri*, is restricted to open-grassland or open-sedgeland where the larval food plant grows in flood plains bordering natural salt-lakes.

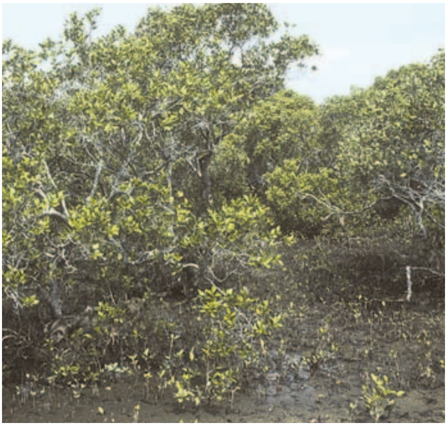

Tropical rainforest

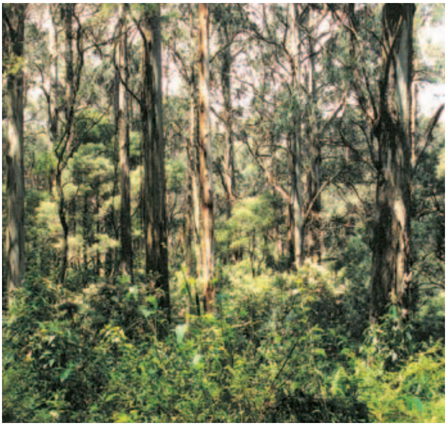
Subtropical rainforest

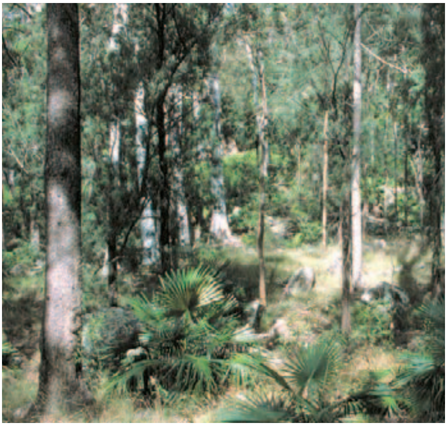
Warm temperate rainforest

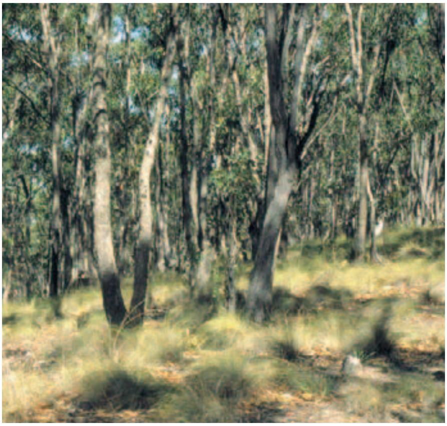
Gallery forest

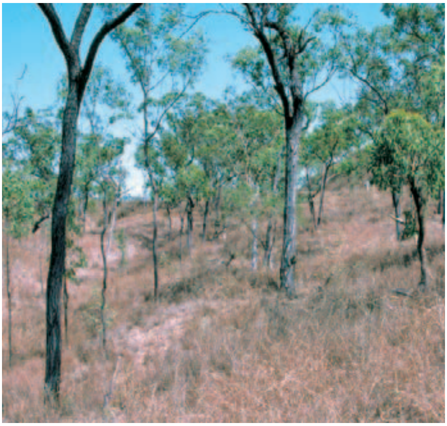
Monsoon forest (deciduous vine thicket)

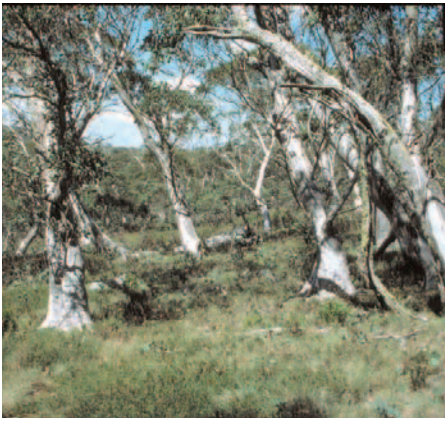

Mangrove

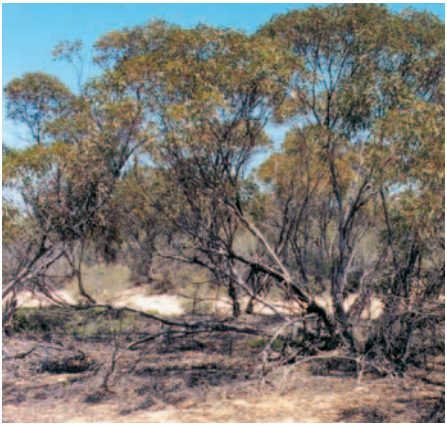

Eucalypt tall open-forest

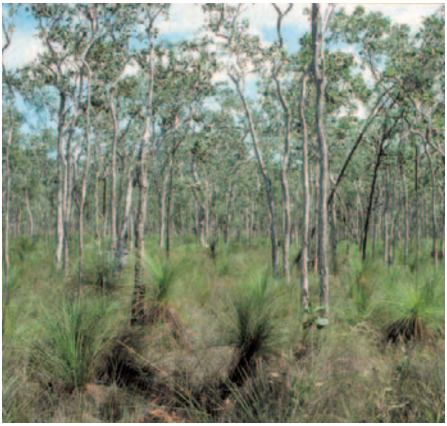

Eucalypt open-forest


Eucalypt woodland


Savannah woodland


Snow gum (subalpine) woodland


Mallee shrubland



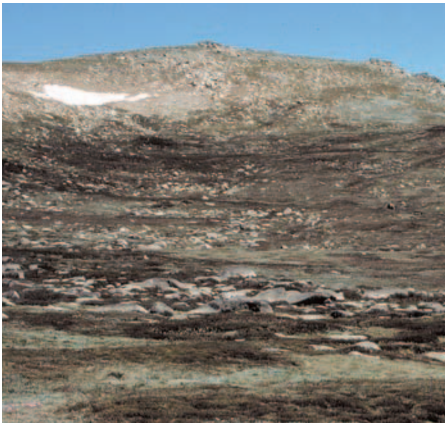
Coastal paperbark woodland

Coastal paperbark swampland

Coastal heathland

Open-sedgeland

Open-grassland



Alpine herbfield

Life cycle and behaviour

Butterflies, as in all Lepidoptera, undergo a complete metamorphosis, which involves four separate stages from egg through larva and pupa to adult (Fig. 8). The egg (or ovum) is laid either singly or in clusters, usually on the underside of a leaf of the larval food plant, or sometimes on the trunk or branches. A few species drop their eggs loosely; either during flight or while the female is settled on the food plant or on a nearby object.

The larva, also known as the caterpillar, is primarily concerned with eating food in order to grow and develop. Most larvae feed on plant leaves, but some eat flowers, seeds or even the immature stages of ants!

Larvae play an essential role in the functioning of our ecosystems: they recycle nutrients from plants back into the soil through their faeces, and they serve as food for insectivorous birds, spiders, insect predators, and parasites such as certain species of flies and wasps.

The pupa, also known as the chrysalis, is the non-feeding stage in which all of the larval organs are reorganised and transformed into those of the adult. The adult, also known as the imago, is responsible chiefly for reproduction and dispersal.

Soon after emergence from the pupa the adults of each sex locate each other and, often after an elaborate courtship, mating takes place. Adults drink fluids, primarily nectar from flowers but also water from puddles, sap flows, and fermenting juices from rotting fruit or dead animals, especially in the tropics.

Many butterflies in Australia, especially in the more temperate areas, are cryptic and rarely seen by the average person. Many are small, well camouflaged, fly fast or high above the tree-tops, or fly for only a few weeks or

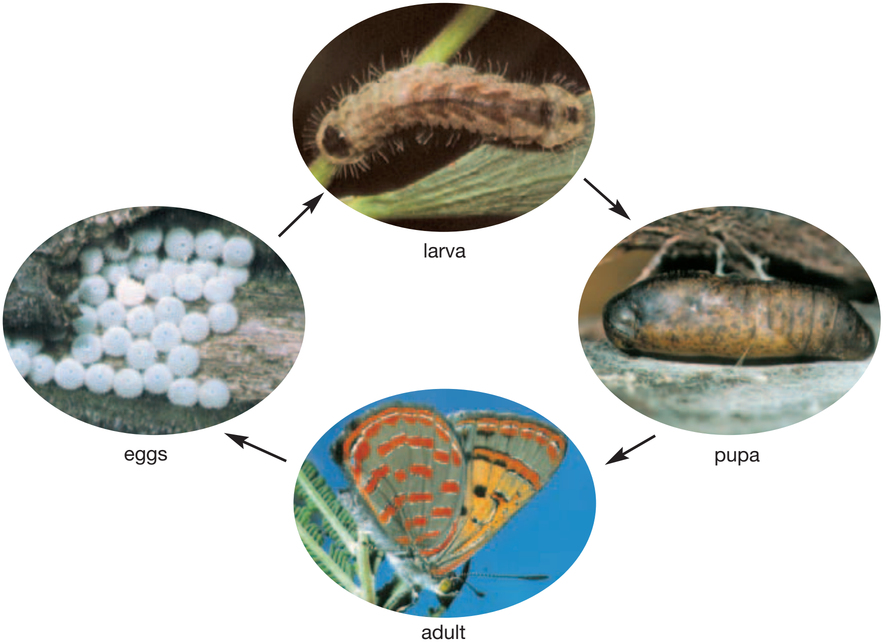


Figure 8. Life cycle of the Moonlight Jewel, *Hypochrysops delicia*.

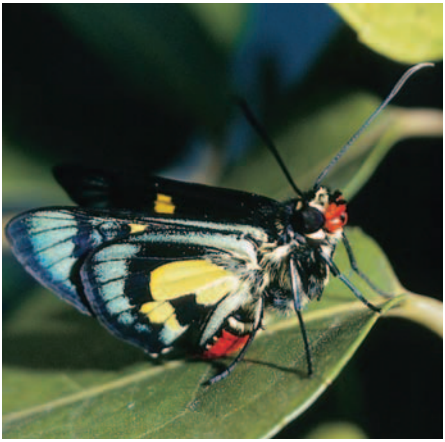
months of the year—often for only a few hours at particular times of the day.

In the field, the most successful collector or naturalist is one who studies the flight behaviour of adult butterflies, noticing the habitats in which they live, the time of day when they are most active, the flowers at which they feed, the places and heights at which males usually fly and establish mating territories, and the larval food plants around which females are most commonly found.

Most butterflies fly only when the sun is shining and has warmed their bodies enough to enable them to fly, although some species may still be active when conditions are overcast but hot. In the hot tropical lowlands they may begin to fly within an hour of sunrise, but in the cooler subalpine areas not until much later in the day. Often the number of adults active on a particular day reaches a peak for a couple of hours around the middle, hottest part of the day, especially at the higher altitudes, while other species are more active early in the morning or late in the afternoon.

Many species feed at flowers during the morning and this is a good time to search for adults, especially those that inhabit tropical rainforest. The males of many species visit the tops of hills or ridges that rise above the neighbouring countryside where they establish mating territories, a behaviour known as 'hilltopping'. The particular hilltopping behaviour displayed by males is characteristic of the species and one can soon learn to recognise the patrolling and perching habits of each species. The females only visit these hilltops briefly for mating.

The duration of the life cycle varies from species to species, and may range from a few weeks to several years. Those species with protracted life cycles often undergo dormancy in one or more of the stages (most frequently the larva or pupa), usually in response to unfavourable climatic conditions, such as the temperate winter or tropical dry season.


Ian Common

Regent Skipper, *Euschemon rafflesia.*

Skippers (Family Hesperiidae)

Skippers are small to medium-sized butterflies with the abdomen long and stout, and the wings usually drab-brown or orange in colour. The adults have a rapid and jerky flight, and usually fly close to the ground amongst grasses and sedges, although a few species fly high in the mid canopy. They generally fly in sunshine during the day, although adults of the Pyrginae are active mainly in the early morning and late afternoon or at dusk, resting in the shade on the underside of a leaf throughout much of the day.

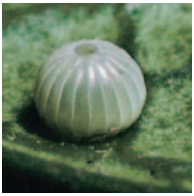
Most Australian skippers settle frequently, basking in sunlight with their fore wings held vertically and opened at an angle of about 90° over the thorax while the hind wings are opened widely in a horizontal plane. However, after a while, or when conditions are warmer, only the fore wings are partially opened or both wings remain completely closed.

In contrast, members of the Pyrginae, when basking or feeding, settle with their wings spread out flat, while those of the Coeliadinae frequently settle upside down beneath a leaf with wings closed.

Males typically establish small mating territories and frequently perch on particular objects, such as an exposed twig, leaf or prominent rock. They defend these territories vigorously, challenging other males of the same species until a female arrives. Males of a number of species hilltop, particularly those in the Trapezitinae. Females are most commonly observed flying around or near their larval food plants, and are rarely found on hilltops. Most skippers are sedentary, but at least one species, the Narrow-winged Awl, *Badamia exclamationis*, is migratory, expanding and contracting its range annually over much of northern Australia.

The egg is hemispherical or dome-shaped, smooth but often with a series of longitudinal ribs. It is usually deposited singly on the under- or upperside of a leaf of the larval food plant. A few species in the genera *Trapezites*, *Anisynta*, *Pasma*, *Dispar*, *Toxidia* and *Signeta* usually lay their eggs on dry leaf litter and other debris near the base of the food plant.

The larva is cylindrical, tapering at each end, and finely spinulose with numerous secondary setae; the head is comparatively large and larger than the prothorax. In *Trapezites*, the larva is short and stout, brown, with a relatively large roughened brown head; in *Hesperilla* it is long and thin, semitranslucent green with longitudinal lines, somewhat resembling those of Hesperiinae; while in *Mesodina* it is densely covered with white waxy powder.

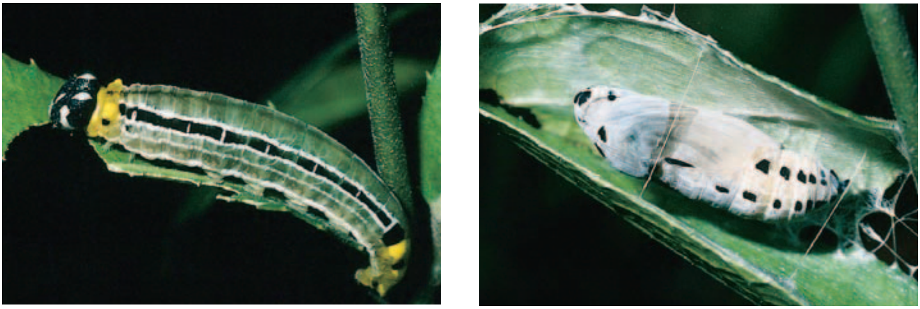

Ted Edwards

The larva feeds on foliage at night, resting by day inside a shelter constructed by folding the edge of a broad leaf or joining two or more leaves together with silk. In the early instars the larva may feed along the edge of a leaf to produce a 'saw toothed leaf' but in the later instars its feeding is often revealed by neatly truncated leaves, particularly in *Trapezites*, some *Hesperilla*, *Motasingha* and *Mesodina*.

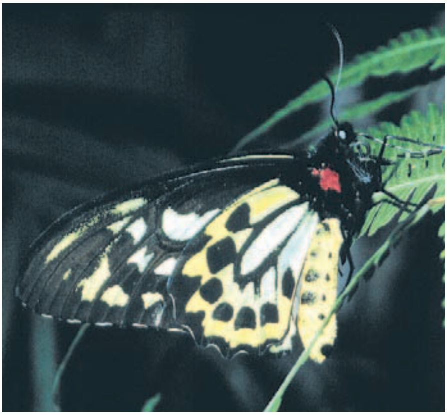
In *Trapezites*, the pupa is short and stout with the abdomen tapering posteriorly, and the head is rounded anteriorly without prominent projections, whereas in *Hesperilla* it is long and cylindrical, green, yellowish-brown or black and may have an anterior projection on the head, sometimes called the operculum or pupal cap.

Pupation usually occurs in the final larval shelter, or occasionally among leaf litter on the ground at or near the base of the food plant. Often a white waxy powder covers the pupa, as well as the interior of the shelter. The pupa is well concealed, being supported by the walls of the shelter and attached to the silken lining by the cremaster and, in a few genera, also by a central silken girdle.

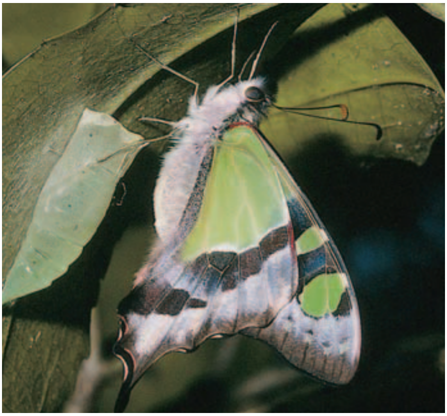
Those species that pupate on the food plant normally reside in an upright position, but in *Antipodia*, *Proeidosa*, *Croitana* and *Mesodina* the larvae pupate head downwards and the opening is located at the bottom of the shelter.



The egg (top), larva (left) and pupa (right) of the Regent Skipper, *Euschemon rafflesia.*



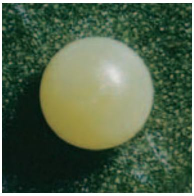
Cairns Birdwing, *Ornithoptera euphorion.*



Macleay's Swallowtail, *Graphium macleayanus*.

Swallowtails (Family Papilionidae)

Swallowtails are large butterflies, often black with various patches of white or green. The adults fly with a strong, rapid and sometimes erratic flight. Both sexes frequently feed from flowers. Large numbers of males of several species visit hilltops where they establish and aggressively defend territories. Few species breed regularly in the same habitat patch and none could be considered to form strictly sedentary populations. At least two species, the Chequered Swallowtail, *Papilio demoleus*, and the Pale Triangle, *Graphium eurypylus*, are migratory, but others infrequently disperse widely outside their normal breeding areas.



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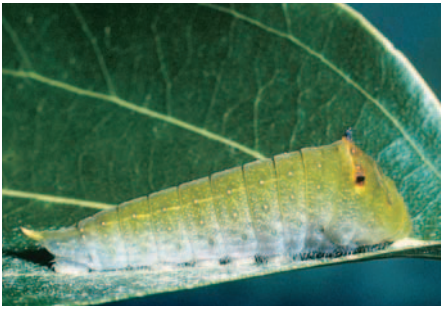
The egg is approximately spherical, usually smooth and, except in the Five-barred Swordtail, *Graphium aristeus*, deposited singly on the leaves of the larval food plant.

The larva possesses an osmeterium, which is an eversible forked fleshy organ, extruded from an anterior dorsal slit on the prothorax when the larva is disturbed. The larva usually feeds openly during the day on the soft new leaves arising from the terminal shoots.

The pupa is attached by the cremaster to a pad of silk and held upright by a central silken girdle. The larva may pupate on a leaf or stem of the food plant or, more frequently, leave the plant to pupate elsewhere on nearby objects.



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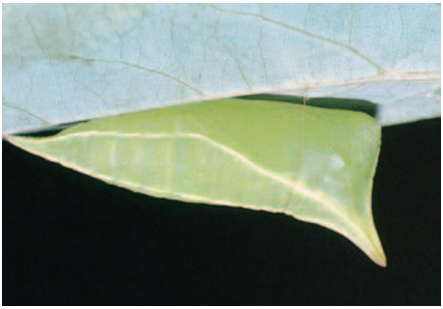

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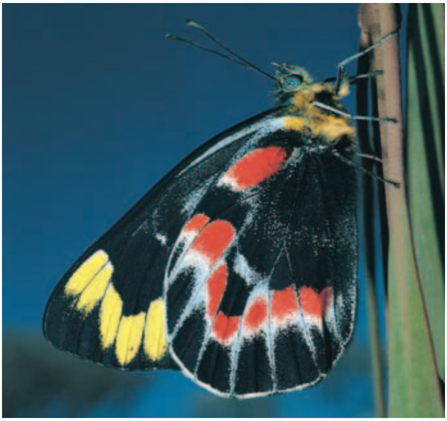
The egg (top), larva (left) of Macleay's Swallowtail, *Graphium macleayanus*, and the pupa (right) of the Blue Triangle, *Graphium sarpedon*.



Imperial Jezebel, *Delias harpalyce*.

Whites and Yellows (Family Pieridae)

Pierids are medium-sized butterflies and are predominantly white or yellow. Adult flight behaviour varies: in *Eurema*, *Elodina* and *Leptosia* it is relatively slow, weak and erratic close to the ground, but in *Catopsilia*, *Appias* and *Cepora* it is very rapid, strong and directional. In *Delias*, the adults have a slow, fluttering or sailing flight and they usually fly high in the canopy of the tallest trees.

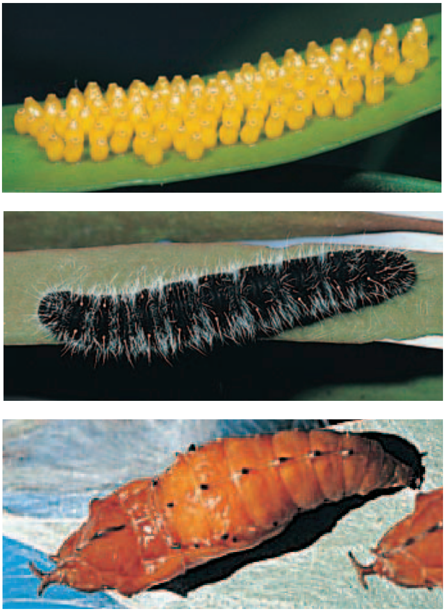
The males of only a few species display hilltopping behaviour. In the tropics, adults of *Eurema*, *Appias* and *Cepora* may be seen congregating in large numbers on moist sand or muddy areas adjacent to streams, drinking fluid.

Many species exhibit seasonal variation, with distinctive wet- and dry-season forms; in some species the wing pattern of the dry-season winter form tends to be darker, with more extensive areas of black on the underside, but in others the underside is more cryptically patterned, especially those which live in tropical savannah habitats. The adults of most species of *Catopsilia*, *Eurema*, *Appias* and *Belenois* fly great distances and are regular migrants, but others also temporarily extend their range outside their normal breeding areas.

The egg is shaped like a spindle, with a series of coarse longitudinal ribs. It is usually white or pale yellow when laid, but within a few days it changes to deep yellow or orange. The egg is usually deposited singly on the leaves of the larval food plant, but in *Delias* and *Belenois*, the eggs are laid in large clusters and the larvae feed gregariously.

The larva is cylindrical, slender and normally covered with short white setae, and feeds openly on the foliage. It is usually green, however, in *Delias* the larva varies from yellowish-green, greenish-brown, brown to dark reddish-brown in colour, and possesses long conspicuous white hairs.

The pupa is often angular in shape; in some groups the head has an anterior projection, which may be short and blunt or a sharp spine, and the abdomen often has a series of dorsal and lateral spines or short projections on the anterior segments. In *Cepora* and *Appias*, the anterior projection forms a very long spine, and in some species of *Delias* the projection is forked into two prominent upwardly curved spines. In *Eurema* and *Catopsilia*, the pupa is slender, without prominent spines, and the wing cases may be produced to form a prominent ventral 'keel'.



The eggs (top), larva (middle) and pupa (bottom) of the Imperial Jezebel, *Delias harpalyce.*

The pupa is often various shades of green or white, but in *Delias* it is mostly bright yellow or orange. It is attached by the cremaster and supported by a central silken girdle to a pad of silk on a leaf or stem. The larva usually pupates singly on the food plant, or sometimes in other situations, especially if the food plant is defoliated. In *Delias* and *Belenois*, however, the larvae usually pupate in small groups on the food plant, or sometimes some distance below the food plant.

Nymphs (Family Nymphalidae)

Nymphs are medium- to large-sized butterflies, in various colours but predominantly brown or orange.

Adults of the Nymphalinae fly during sunny periods in warm or hot conditions. They have a strong, rapid and direct flight, and frequently settle in full sunlight or in sunlit patches on a prominent leaf, twig or flower, or on the ground to bask with the wings outspread. A few species, notably in the genera *Junonia, Doleschallia* and *Yoma*, have cryptic underside patterns on the wings which, when closed, harmonise effectively against a leaf or dry debris.

In contrast, members of the Satyrinae are generally shade-loving, sedentary insects, frequenting sunlit patches in the undergrowth and dense grass in wooded gullies or the margins of rainforest. Their flight is generally weak and irregular, but when disturbed they fly faster and much more erratically. They often feed from flowers and a few tropical species are attracted to rotting fruits. At rest the wings are usually held closed above the body so that the protectively patterned underside is displayed, but the wings are occasionally opened momentarily to expose the prominent eyespots on the upperside. Species of *Oreixenica* roost in large aggregations amongst tall grasses or foliage of shrubs in sheltered spots during the evening. Species of *Mycalesis* and *Melanitis* exhibit pronounced seasonal variation, with distinctive wet- and dry-season forms; the 'dry-season forms' stop breeding and aggregate in moist refugia during the dry season. Females of three temperate species in the genera *Heteronympha* and *Geitoneura* exhibit similar behaviour during summer.

Spotted Alpine Xenica, *Oreixenica orichora*.

Adults of the Danainae have a slow and laboured or gliding flight, but when disturbed or migrating are capable of rapid sustained flight. Both the body and wings are exceptionally strong and 'leathery', and the insects are very tenacious of life. The males are frequently attracted to, and feed on, damaged or decaying plant parts, mainly species in the families Fabaceae, Boraginaceae and Asteraceae, from which they sequester pyrrolizidine alkaloids; chemicals believed to be essential in the manufacture of their hairpencil pheromones.

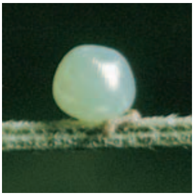
The egg is very variable in shape and may be spherical, almost spherical with the apex flattened, dome-shaped, barrel-shaped, bottle-shaped or elongate and subconical with the apex slightly truncate; the base is always flattened and the egg-shell, known as the chorion, often has prominent longitudinal ribs and fine transverse ribs, except in *Taenaris* and Satyrinae in which it is smooth.

The egg is usually green, pale yellow or cream. It is usually deposited singly on a leaf of the larval food plant, but in some species of

Oreixenica and *Heteronympha* the egg is dropped at random as the female rests or flies over the grass. In *Taenaris*, *Cethosia*, *Acraea* and *Mynes*, the eggs are laid in clusters, and the early instar larvae feed gregariously.

The larva is long and cylindrical with fine hairs but is very variable in colour, pattern and structure. The surface of the body may be relatively smooth but clothed with very short, dense setae, or have numerous bristles, or long tapering spines adorned with bristles or short barbs. In the Danainae, the larva has several (2–4) pairs of long fleshy filaments on the mesothorax, metathorax and abdominal segments 2 and 8. In the Biblidinae, the larva has one or two pairs of long and slender, or rounded, often spiny processes on the thorax, and one or two pairs of similar but shorter processes on the abdomen.

The head of the larva may be smooth or have a pair of short pointed projections, a pair of prominent dorsolateral projections or horns, two pairs of prominent tapering horns, or a pair of branched spines. The larvae feed on foliage, often at night, but many species also feed openly during the day.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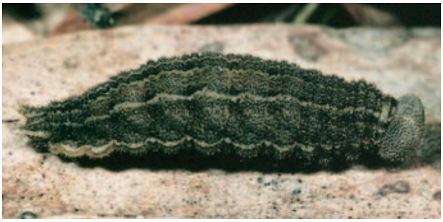

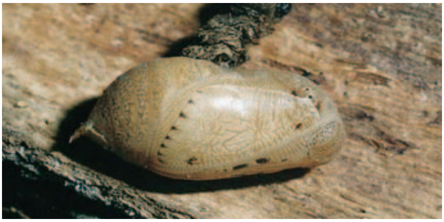
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The egg (top), larva (middle) and pupa (bottom) of the browns, *Heteronympha solandri, H. paradelpha* and *H. penelope,* respectively.

The pupa may be fairly smooth, short and stout or rounded, or more elongate with angular projections anteriorly, sometimes with a series of dorsolateral spines or short pointed processes on the abdomen. In *Cethosia*, the pupa is grotesquely shaped, with various projections or spines and expansions of the anterior and dorsal surfaces. The pupa is normally suspended head downwards by the cremaster on the larval food plant or on nearby vegetation, although sometimes it lies unattached on the ground beneath debris at the base of the food plant.

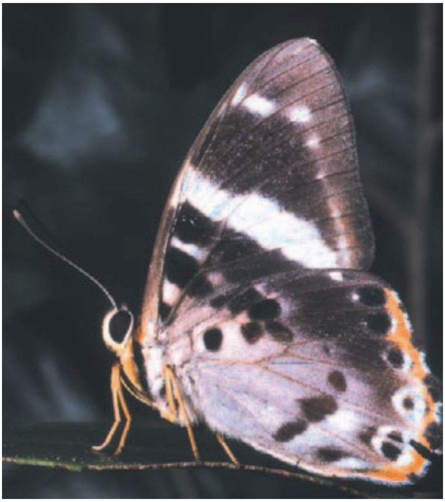
Metalmarks (Family Riodinidae)

Metalmarks are small to medium-sized butterflies. Only one species, in the genus *Praetaxila*, occurs in Australia. It flies mainly in patches of sunlight, and is most active during late morning and early afternoon. It may be found in dense rainforest with a deeply-shaded interior, or in more open sunlit areas, such as along tracks within the rainforest.

In *Praetaxila,* the egg is purple, barrel-shaped, with rounded sides and flattened base and top, and a smooth surface with a band of fine white hairs just below the upper rim. Eggs are laid in small, loose clusters on the underside of an old leaf of the larval food plant.

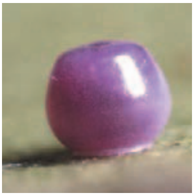
In *Praetaxila,* the larva is long, cylindrical and slightly flattened, with tufts of numerous long subdorsal and lateral hairs arising from each segment. The first instar larva consumes most of the egg-shell. The larvae feed gregariously and from the second instar onwards forage at night on the young leaves; during the day the final instar larvae shelter singly or in groups beneath dead leaves and other debris on the ground near the base of the food plant.

In *Praetaxila,* the pupa is stout and cylindrical, purplish-brown or sometimes pale brown and densely furnished with long


Peter Samson

Harlequin Metalmark, *Praetaxila segecia*.

brown hairs; the prothorax is slightly flattened and rounded anteriorly, with a median indentation. The larva pupates on the ground amongst dead leaves, the pupa being attached at its anal end and supported by a central girdle.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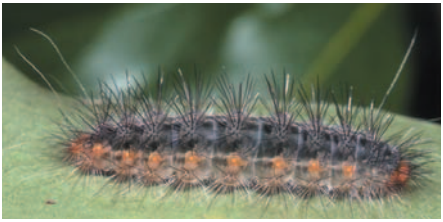
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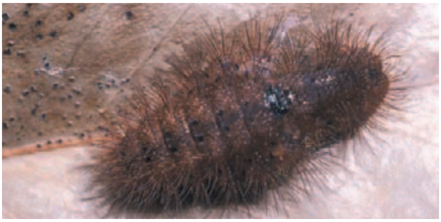

Peter Samson

The egg (top), larva (middle) and pupa (bottom) of the Harlequin Metalmark, *Praetaxila segecia.*

Blues (Family Lycaenidae)

Blues are small to medium-sized butterflies. They usually have a brilliant iridescent blue, purple or green upperside, but on the underside have various shades of brown or white, with a complex pattern of darker lines and markings.

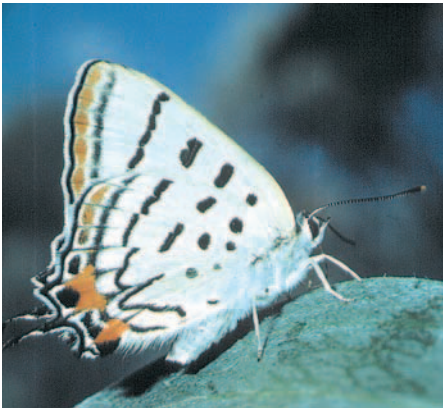
The adults of several species in this family comprise some of the most beautiful butterflies in the fauna. Most species usually fly very rapidly, some high around the tree-tops, while others fly and settle closer to the ground with a weaker and more erratic flight. They fly mainly during sunshine and soon settle when clouds completely obscure the sun.

When settled, blues may bask with wings partly opened, revealing the brilliant iridescent upperside colours. Males frequently establish and vigorously defend territories by perching on prominent objects, such as a leaf or dead branch, sometimes near the canopy or crown of a tree, or on sticks, rocks and herbs on or closer to the ground. A few species strongly hilltop; in the Theclinae the males are usually observed on the summit of steep hills only during the afternoon.

The adults, when settled (with the exception of *Candalides* and *Nesolycaena*), perch with the wings closed or opened slightly, head directed downwards, and slowly move the hind wings, which often bear a slender tail near the tornus, alternately up and down.

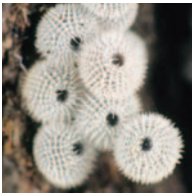
In those species which have tornal lobes, the lobes are bent at right angles to the hind wing so that when the wings are closed they appear as small dark rounded protrusions when viewed from above. The tails and tornal lobe resemble the antennae and eyes of the head, and these probably have a protective function, directing any attack from a predator towards the parts of the hind wings that can be lost without disadvantage to the insect itself.

The egg is usually white or pale green, approximately spherical, with a micropylar depression at the apex, and often mandarin-shaped, with the diameter greater than the height. The egg is deposited singly or in clusters on the larval food plant.



Northern Hairstreak, *Jalmenus eichhorni*.

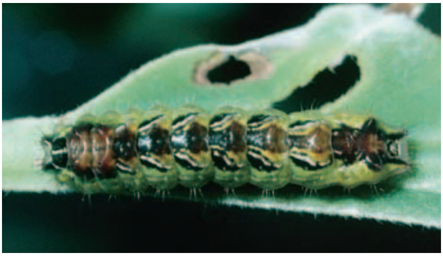
The larva is flattened with the head retractile and withdrawn beneath the prothorax; the cuticle is much thicker and tougher than in the other families; the hairs or setae are often greatly reduced, but the body is usually clothed with numerous short dense hairs or minute secondary setae which may be branched or clubbed, or even have expanded stellate tips. In most groups there is a dorsal nectary organ on abdominal segment 7 and a pair of dorsolateral eversible organs on segment 8, both of which attract and reward or appease ants (see page 27). In *Liphyra,* the larva is oval-shaped and flattened, with a hard, leathery, pale-brown skin.

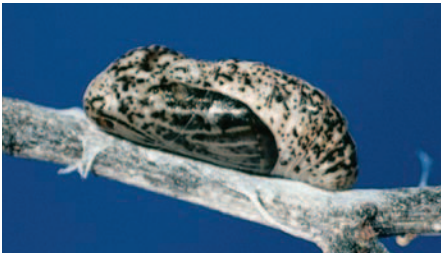


The first instar larva eats a small round hole from the top of the egg but does not consume the empty shell after emergence. The larva may feed on the new soft leaves, flower buds, and flowers or internally on the seeds within fruits of the larval food plant or, in a few species, on immature stages of ants. Many species feed at night, retreating by day to hide in cracks or crevices, beneath loose bark, in holes in the branches and trunk produced by wood-boring insects, in curled or joined leaves, or in the attendant ants' nests in the soil at the base of the food plant.

The pupa, though often stout and cylindrical, is variable in form and colour, though often dark brown-black to pale yellowish-brown, and may be smooth, rugose, or covered with short erect hairs, or minute tapering, clubbed or even branched spinules. In *Candalides* and *Nesolycaena*, the pupa has a lateral flange at the head and on the abdomen. In *Liphyra,* the pupa is stout and formed within a puparium. The pupa is usually attached at its posterior end to a pad of silk, by a series of minute anal hooks on the underside of abdominal segments 8–10, and supported by a central silken girdle. It is usually found in similar concealed situations in which the larva shelters, however, in *Jalmenus* and most species which feed on flowers, the larvae almost always pupate openly on the larval food plant. In some genera, the pupa has no central girdle and is attached only by the anal hooks, while in a few others it just lies loose on or below the ground.

The pupae of many species often stridulate when disturbed, producing an audible clicking sound by means of special structures between abdominal segments 5 and 6.





The eggs (top), larva (left) and pupa (right) of the hairstreaks, *Jalmenus ictinus*, *J. eichhorni* and *J. daemeli*, respectively.

How to use this book

All species recorded from the Australian mainland are covered on pages 32–301 with text, full colour plates and distribution maps. Those species found only on the more distant islands administered by various Australian governments are covered on pages 302–309 in less detail, without distribution maps. These islands include Cocos-Keeling Island and Christmas Island in the Indian Ocean southwest of Java, the northern Torres Strait (Boigu, Dauan, Saibai islands) and eastern Torres Strait (Darnley, Murray, Yorke islands, etc.) near mainland New Guinea, and Lord Howe Island and Norfolk Island in the South Pacific Ocean. Some of these islands are not biogeographically part of Australia, especially Christmas Island, and several of the species have been recorded only once or on very few occasions.

Colour plates

The adult specimens illustrated in the colour plates are, in most cases, presented as a block of four specimens, with males on the left and females on the right. The upperside of the butterfly is shown in the top row and the underside in the row below; underside specimens can be distinguished by the way in which the hind wing overlaps the fore wing. Subspecies, geographical forms, seasonal forms, and other forms of variation are sometimes shown as a third column to the right of the main block of four specimens. In most cases, specimens are shown as life size or slighly smaller. Larger butterflies are shown at significantly smaller scale—sometimes only 40–60% actual size.

Common name

The common name for each species is based primarily on those listed in Braby (2000), with several amendments based on advice and suggestions from the wider scientific community and butterfly fraternity. Many of these names differ from those in Common and Waterhouse (1981) and the rationale for these changes was discussed by Braby et al. (1997). The major changes to common names since Braby (2000) are Sciron Ochre for Mallee Ochre, *Trapezites sciron*; New Guinea Birdwing for Northern Birdwing, *Ornithoptera priamus*; Purple Copper for Bathurst Copper, *Paralucia spinifera*; and Chequered Copper for Grassland Copper, *Lucia limbaria*. Where other names exist, several, but not all, of these are listed.

Bronze Flat, *Netrocoryne repanda*.

Scientific name

The scientific nomenclature used throughout the book follows, with a few exceptions, the *Checklist of the Lepidoptera of Australia* by Nielsen et al. (1996) and the *Zoological Catalogue of Australian Lepidoptera: Hesperioidea, Papilionoidea* by Edwards et al. (2001). These recent works have adopted the trend in the Lepidoptera community to use the original spelling of species names, rather than altering them to agree in gender with the generic name when these names are Latinised as required by the International Code of Zoological Nomenclature published in 1999.

Several additions and taxonomic changes to the fauna have been made since, or were not recognised in, the publications of Braby (2000) and Edwards et al. (2001). These additions/changes include the following: *Croitana arenaria* from Eyre Peninsula has been described as a distinct subspecies *Croitana arenaria pilepudla* (Grund 2003); *Ornithoptera priamus euphorion* is now a distinct species *Ornithoptera euphorion* according to evidence presented by Hancock (1991), Hancock and Orr (1997), Morinaka et al. (2000) and Kondo et al. (2003); *Ogyris otanes* 'south-western form' has been described as a formal subspecies *Ogyris otanes arcana* (Williams and Hay 2001); *Ogyris otanes* 'western coastal form' has been described as a formal subspecies *Ogyris otanes sublustris* (Williams and Hay 2001); *Candalides hyacinthina* 'south-western form' has been described as a formal subspecies *Candalides hyacinthina gilesi* (Williams and Bollam 2001); *Candalides heathi* 'Wimmera form' has been described as a distinct species *Candalides noelkeri* (Braby and Douglas 2004); *Zizina otis* (Moulds and Lachlan 1987) and *Appias olferna* (Lambkin and Knight 2004) are newly recorded from Christmas Island. Two species in Braby (2000), *Pseudoborbo bevani* from the NT and a species of *Arhopala* from Saibai Island in northern Torres Strait, are not included in this work. The former species does not appear to be established in Australia, while the identity of the latter has not been determined with certainty.

Wingspan

Wingspan refers to the average wingspan of both sexes for each species and provides an indication of adult size; it is defined as the straight-line distance between the tips or apices of the fore wings of correctly spread specimens where the dorsum of each fore wing is positioned at right angles to the body. The average wingspan was calculated from a sample of 10 specimens where sufficient material was available.

Similar species

Some species may be easily confused with others. These similar species are listed for each species and, where space was available, the important differences (e.g. wing colour, pattern and shape) between them indicated. Pointers on the colour plates highlight some of the characters used to distinguish species from other similar species.

Variation

For species that show significant variation, the text may include brief comments on the type of adult variation, that is, geographical (subspecies), seasonal (polyphenism), individual or another form (e.g. polymorphism). Where subspecies have been recognised, the number listed refers only to the number recorded for that species from Australia and not from the entire range of the species. Variation is an important aspect to consider when making an identification because the specimens illustrated in the plates represent only a small sample of the total range of variation that a species may exhibit.

Behaviour

For each species, the text gives brief comments on adult behaviour where this is known or at least has been documented. These include flying habits, migration, territoriality, hilltopping, resting, basking and feeding, noting any differences between the sexes. The number of generations completed annually, where known, is given, followed by comments on the season (months) of the year when adults are generally most abundant. The adult flight period (temporal distribution), either for specific localities or for broad regions within the species' geographic range, is depicted in the flight chart (phenogram) above the distribution map.

Habitat

For each species, the text lists the main types of habitat or vegetation type in which they breed, where this is known.

It is important to distinguish breeding habitats from other habitats that are used for nectar foraging or mating. Breeding habitats refer to those environments where the larval food plants grow and the butterfly completes its life cycle, from egg to adult. These habitats are usually, but not always, the same habitats in which the adults are most often found. For example, adults of the Yellow Sedge-skipper, *Hesperilla flavescens*, are found only in sedgeland habitats, often in slightly saline swamps or along edges of lakes, which is also the breeding habitat. In contrast, males of the Chequered Sedge-skipper, *Hesperilla mastersi*, are often found in dry eucalypt open-forest or woodland on prominent hilltops, which they use to establish mating territories; however, they do not breed in these habitats, but breed mainly in nearby rainforest where the larval food plant grows in the moister, more shaded areas.

Status

The status given for each species comprises two components: relative abundance and spatial distribution. The conservation status of threatened species, subspecies and populations, where sufficiently known, is also included.

Golden-rayed Blue, *Candalides noelkeri*, a threatened species endemic to western Victoria.

Relative abundance refers to the approximate number of adults likely to be encountered during an average day's field work (approx. 4–6 hrs) under optimal conditions of weather, time (i.e. season or month of year, and time of day) and space (i.e. breeding habitat). The relative abundance of each species is allocated to one of four arbitrary categories (rare or rarely seen, uncommon, common, and very common) according to the following quantitative scale in an attempt to standardise usage of terms:

Relative abundance category	Number of adults (per habitat type per day)
rare or rarely seen	0 or 1
uncommon	2–9
common	10–99
very common	>100

These rankings are necessarily somewhat subjective since the abundance of Australian butterflies have rarely been estimated quantitatively. Nevertheless, the scheme provides a useful framework.

For example, if one searched for adults of the Chequered Copper, *Lucia limbaria*, in the grassland plains and low hills of the ACT during calm, sunny weather in late spring or summer during the mid to late morning, one would expect to see more than 10, but probably less than 100, in most years. Hence, an estimate of its relative abundance would be 'common'. In contrast, if one searched for adults of the Tailed Emperor, *Polyura sempronius*, around the suburbs and dry grassy woodlands of the ACT, particularly where trees of *Brachychiton populneus* or *Acacia mearnsii* grow (i.e. the breeding areas), during late summer and early autumn, one would expect to see more than one but probably less than 10. Its relative abundance would be better designated as 'uncommon'.

Species classified as 'rare' are those which nearly always occur naturally in very low population densities, that is, both the adults

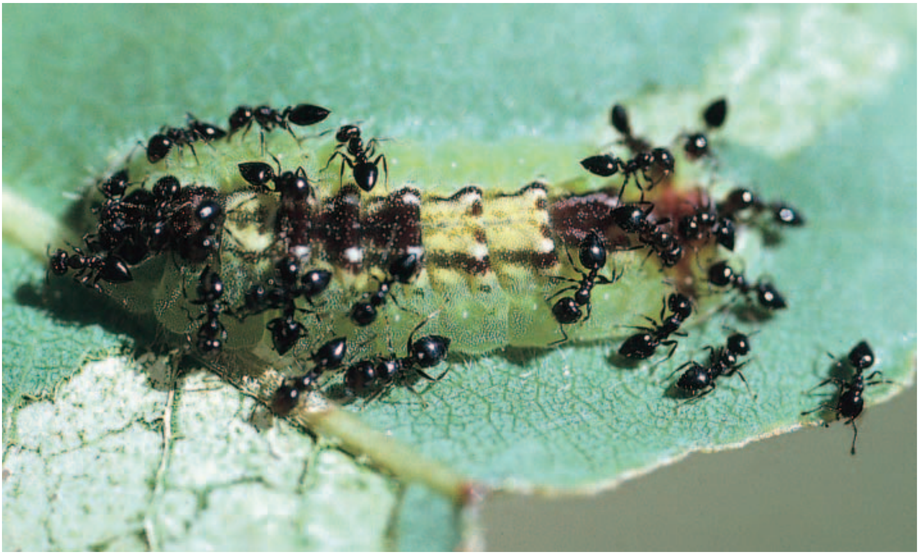
Chequered Copper, *Lucia limbaria*, a common but local species.

and immature stages occur in low numbers locally or are very sparsely distributed over a wider area. In general, few Australian butterflies are 'rare', although some species are much less abundant or rarer in certain parts of their range than in others. Examples of rare species include the Ornate Ochre, *Trapezites genevieveae*; Heath Sand-skipper, *Antipodia chaostola*; and Mangrove Ant-blue, *Acrodipsas illidgei*. Other species, such as the White Albatross, *Appias albina*; Turquoise Emperor, *Apaturina erminea*; and Azure Moonbeam, *Philiris azula*, are perceived to be rare but this may be due merely to ignorance about their ecology, habitat preference, larval food plant and seasonality.

On the other hand, the adults of many species are rarely collected or observed because of their cryptic behaviour, such as having very short activity times, flying above the canopy or flying at dusk, but their immature stages are otherwise abundant in the appropriate habitat. These butterflies are designated as 'rarely seen' and include numerous examples, such as the Ornate Dusk-flat, *Chaetocneme denitza*, Small Darter, *Telicota brachydesma*, Amethyst Jewel, *Hypochrysops elgneri*, Large Moonbeam, *Philiris diana*, Princess Flash, *Deudorix smiles*, and Moth Butterfly, *Liphyra brassolis*.

Spatial distribution refers to the area in space or geographic distribution of a species across the landscape. At one extreme species may have very small distributions or narrow ranges, while at the other have very wide distributions or broad ranges. Species having very small geographic distributions are, in this book, designated as being 'restricted'. Those having wider distributions may be either 'widespread' in which the populations are more or less continuously distributed over the range of the species, or more 'localised' in which the populations are spatially very patchy, either across the landscape or within the preferred habitat or both. For instance, many species in the families Hesperiidae and Lycaenidae occur only in very specific habitats, which may be limited in size or are patchy within the landscape, and within these habitats the species may breed in very circumscribed areas because of their ecological specialisation, that is, they are very local in occurrence. Such species are thought to be made up of a metapopulation. Taking our two examples above of the Chequered Copper and the Tailed Emperor, both species have broad ranges but quite different habitat preferences and population structures: the Chequered Copper occurs mainly in remnant grassland and grassy open-woodland where it breeds very locally on *Oxalis*, whereas the Tailed Emperor occurs throughout a wide variety of habitats, including suburban gardens, and breeds on a very wide range of plants. Thus, the status of the Chequered Copper would be regarded as 'common but local', whereas that of the Tailed Emperor would be 'uncommon but widespread'.

It should be emphasised that rare species are not necessarily threatened and therefore usually of little or no conservation concern. The conservation status (i.e. extinct, critically endangered, endangered, vulnerable, lower risk) of a species is an assessment of the degree to which the species is threatened, not its relative abundance, and involves an understanding of the threatening processes



Larva of the Copper Jewel, *Hypochrysops apelles*, with attendant ants, *Crematogaster*.

impacting on that species. The conservation status of all threatened taxa is included under 'status', with the IUCN categories derived mainly from the provisional listings in *The Action Plan for Australian Butterflies* by Sands and New (2002), published by Environment Australia.

Larval food plants

A brief list of the species of plants eaten by larvae as food are given for each species of butterfly, with comments made where preferences have been noted or where a butterfly species is found to utilise particular plant parts (e.g. flowers, seeds) or plants in different parts of its geographic range. If more than 10 species have been recorded, then usually only the genus is listed. For species which feed on a much wider range of plants (50 or more species), usually only the families are listed.

Larval attendant ants

The larvae of many blues (family Lycaenidae) are attended by ants. For each butterfly species, the text gives the species of ants involved, together with the type of association. There are five general types of association between ants and butterfly larvae according to the degree of dependence on ants by larvae: never attended, rarely attended or weakly myrmecophilous, facultative myrmecophilous, obligate myrmecophilous, and myrmecophagous.

In this book, species that are never attended by ants are designated as 'none'; those that are rarely attended are designated as 'very occasionally'; while those that have facultative myrmecophilous associations, usually with a wide range of ants, are designated as 'occasionally'. Species that have obligate myrmecophilous associations with ants are constantly attended by large numbers of ants, and the associations are usually very specific, with the larvae being attended by only one, or a few closely related, species of ants. Butterflies that are myrmecophagous are those in which the larvae either feed on the immature stages of ants or are fed by ant regurgitations. Species of larval attendant ants, and the type of association, are based primarily on the extensive review published by Eastwood and Fraser (1999).

Distribution maps

The known geographic range of each species recorded from the Australian mainland is shown on the distribution map. Where more than one subspecies, or geographical form that has not yet been accorded with subspecific status, is recognised, the distribution of each is indicated in different colours. Areas designated by a question mark (?) indicate that the subspecific status of the relevant population has not been determined with certainty.

The distribution maps give only a generalised distribution and, in many cases, gaps in the ranges shown often reflect lack of collecting or recording and do not necessarily reflect natural disjunctions in range. For example, the arid zone of Australia has been very poorly surveyed for butterflies and in some regions such as the Great Sandy Desert, Gibson Desert, Great Victoria Desert and parts of the Simpson Desert there are very few or no records. Similarly, knowledge of the breeding range is also very fragmentary for the majority of Australian butterflies.

The distribution maps are produced in three tones:

- shaded areas represent the known distribution; for most species this area is inferred to be the breeding range where populations are resident and permanently established, for others it may denote the range over which the species may be nomadic with the populations dispersing locally on a regular basis or migrating more opportunistically when conditions become suitable;
- cross-hatched areas represent parts of the range where the species is known to occur only temporarily; the populations may be transient and breed for a limited period, or they may represent non-breeding vagrant adults which have dispersed far beyond the normal breeding range;
- non-shaded areas within the indicated distribution represent former parts of the range where populations no longer occur due to loss of habitat.

Abbreviations

The following abbreviations are used in the text:

♂ = male
♀ = female

FW = fore wing
HW = hind wing
FWs = fore wings
HWs = hind wings

n. = northern
s. = southern
e. = eastern
w. = western
ne. = north-eastern
nw. = north-western
se. = south-eastern
sw. = south-western
c. = central
cc. = central-coastal
cn. = central-northern
cs. = central-southern
ce. = central-eastern
cw. = central-western

NT = Northern Territory
QLD = Queensland
NSW = New South Wales
ACT = Australian Capital Territory
VIC = Victoria
TAS = Tasmania
SA = South Australia
WA = Western Australia

Jan = January
Feb = February
Mar = March
Apr = April
Jun = June
Jul = July
Aug = August
Sep = September
Oct = October
Nov = November
Dec = December
* = introduced larval food plant or introduced larval attendant ant

Greenish Grass-dart, *Ocybadistes walkeri*.

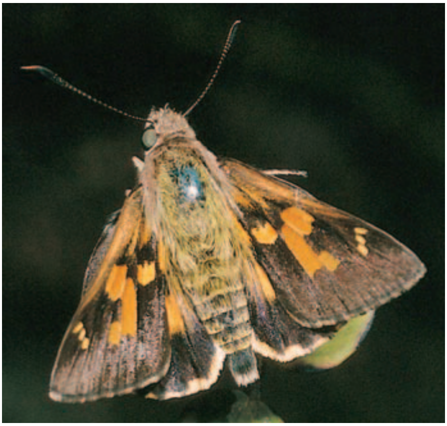
How to identify Australian butterflies

To identify your butterfly, first use the pictorial guide on the following pages to place your specimen into one of the six families. Once a family has been selected then turn to the appropriate page numbers of that family and work through the colour plates to match your specimen with the specimens illustrated, using the following steps:

- Examine the colour plates to find the illustrations of species that best match the specimen in question.
- Examine the distribution maps of likely species; this is useful in assessing whether the locality from which the specimen was collected falls within the known distribution; species with distributions significantly outside the locality of collection can usually be discounted (unless of course a substantial range extension has been discovered).
- For each likely species consult the section on similar species to determine the critical characters that distinguish that species from all other similar species.
- Once the species has been provisionally determined then read the information on behaviour, habitat, status and larval food plants to see that the text for this species agrees with what you have observed in the field.
- If in doubt as to the identity of the species, or you believe a new species has been discovered, then consult an Entomology Department of one of the State Museums or the Australian National Insect Collection in Canberra.

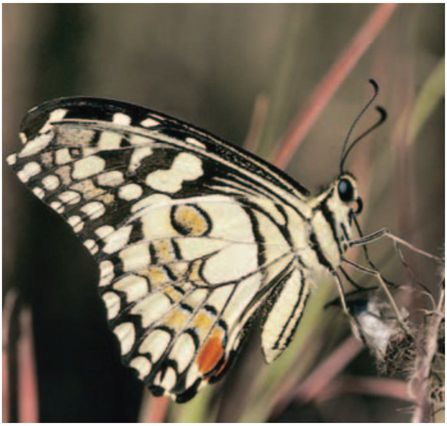
If you require further information about the family to which your specimen belongs, then turn to the summaries of the life cycle and behaviour section on pages 14–22.

Skippers Hesperiidae (pages 32–113)
Small to medium-sized butterflies (average wingspan 22–55 mm, typically around 30 mm) with abdomen long and stout, wings usually drab brown or orange in colour. Tornus of hind wing usually rounded or sometimes slightly produced; antennae widely separated at base, with apiculus of club curved or sharply bent with tip blunt or pointed; radial vein of fore wing has five branches, all of which arise separately from cell; both sexes have six normal functional legs, with tarsi having a pair of simple apical claws.



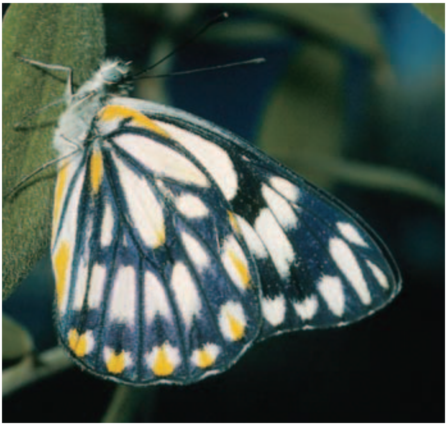
Silver-studded Ochre, *Trapezites iacchoides.*

Swallowtails Papilionidae (pages 114–125)
Large-sized butterflies (average wingspan 60–110 mm, but sometimes larger), often black with various patches of white or green. Tornus of hind wing often conspicuously tailed; antennae relatively close together at base; radial vein of fore wing has five branches, of which two (R_4 and R_5) are usually stalked; both sexes have six normal functional legs, with tarsi having simple but well developed apical claws.



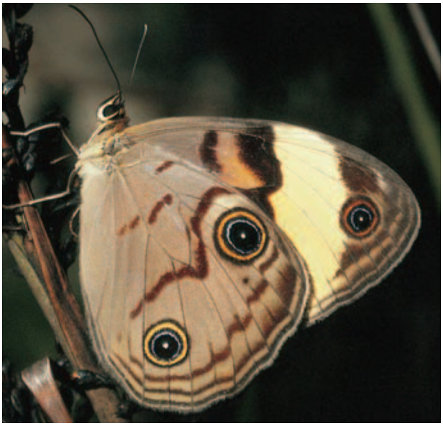
Chequered Swallowtail, *Papilio demoleus.*

Whites, Yellows Pieridae (pages 126–149)
Medium-sized butterflies (average wingspan 30–70 mm, typically around 50 mm), predominantly white or yellow. Tornus of hind wing rounded without tail; antennae relatively close together at base; radial vein of fore wing has at least one of the five branches missing and two branches are usually stalked; both sexes have six normal functional legs, with tarsi having conspicuous bifid apical claws.

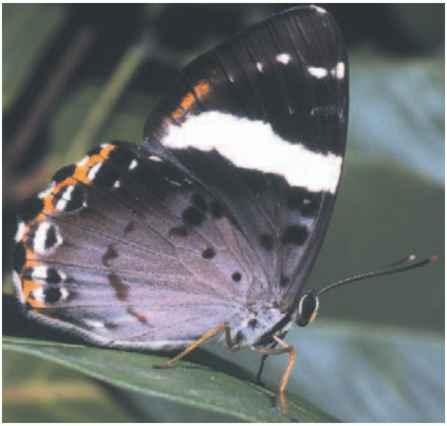


Caper White, *Belenois java.*

Nymphs Nymphalidae (pages 150–203)
Medium to large-sized butterflies (average wingspan 30–90 mm, typically around 50–60 mm), various colours but predominantly brown or orange. Tornus of hind wing usually rounded, rarely tailed; antennae relatively close together at base; radial vein of fore wing has five branches, some of which are stalked; both sexes have only four normal functional legs, with fore legs substantially smaller in size, pressed against thorax, in males fore tarsi often reduced to single elongate segment without apical claw, in females fore tarsi usually with five segments and apically clawed.

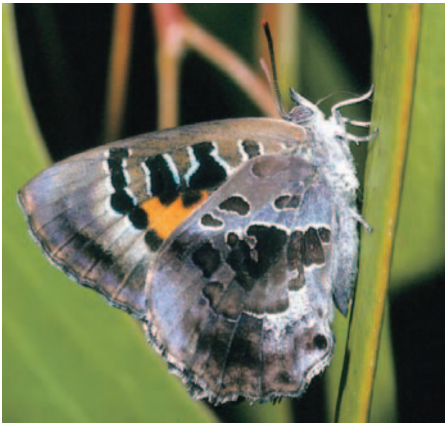

Northern Sword-grass Brown, *Tisiphone helena.*

Metalmarks Riodinidae (pages 204–205)
Small to medium-sized butterflies, but only one species in Australia (average wingspan 45 mm). Tornus of hind wing rounded and weakly lobed towards termen; antennae relatively close together at base; radial vein of fore wing has all branches present with R_1 touching Sc for some distance before running separately to costa; males have only four normal functional legs, with fore legs smaller in size, with tarsi fused into a single segment and without claws, females have six normal functional legs, with fore tarsi five-segmented and with paired apical claws.


Peter Samson

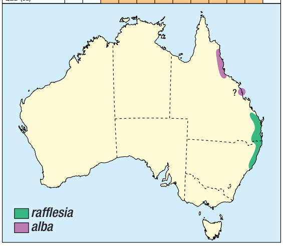
Harlequin Metalmark, *Praetaxila segecia.*

Blues Lycaenidae (pages 204–301)
Small to medium-sized butterflies (average wingspan 15–50 mm, typically around 25 mm), usually brilliant iridescent colours on upperside. Tornus of hind wing often produced into slender tail or sometimes two tails; antennae relatively close together at base; radial vein of fore wing usually has one or two of the five branches missing (mostly R_3 and/or R_4) and some branches usually stalked; males usually have only four normal functional legs, with fore legs being smaller in size, with tarsi usually unsegmented and without claws or with a single apical claw, females have six normal functional legs, with fore tarsi five-segmented and with paired apical claws.


Orange-tipped Azure, *Ogyris iphis*.

Regent Skipper *Euschemon rafflesia*

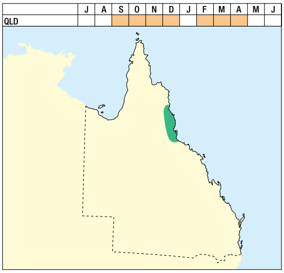
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (N)		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
QLD (SE)			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	



Wingspan: ♂ 54 mm, ♀ 61 mm. **Similar species:** none. The Regent Skipper has the upperside colour black with bright lemon-yellow bands. **Variation:** two subspecies, both have the lemon-yellow spots and bands; very occasionally cream or white. **Behaviour:** adults are active mainly during late afternoon, but may also be observed flying early in the morning and at dusk; they frequently settle, with wings outspread, on foliage of trees in the mid canopy; they also feed at flowers such as *Lantana* on roadsides. Males fly rapidly and often gather on hilltops and ridges, especially in the more open areas towards dusk. Number of generations completed annually not recorded. **Habitat:** usually tropical and subtropical rainforest in both upland and lowland areas, where the larval food plants grow; also ecotone between rainforest and montane eucalypt tall open-forest, particularly in ne. QLD. **Status:** generally common but local; lower risk in cc. NSW. **Larval food plants:** usually *Tetrasynandra pubescens* in ne. QLD and *Wilkiea huegeliana* in se. QLD and ne. NSW; also *T. laxiflora, W. macrophylla.*

Purple Dusk-flat *Chaetocneme porphyropis*

	J	A	S	O	N	D	J	F	M	A	M	J
QLD			🟧	🟧	🟧	🟧		🟧	🟧	🟧		



Other name: Purple Brown-eye. **Wingspan:** ♂ 55 mm, ♀ 57 mm. **Similar species:** Banded Dusk-flat. The Purple Dusk-flat has the upper and underside ground colour purplish-brown with the HW apex yellow. **Behaviour:** adults are most active during late afternoon and may continue flying until dusk; sometimes they are seen feeding from flowers of *Lantana* along the edges of the forest. Females usually fly in more open areas, such as along streams and tracks within the forest in search of larval food plants. Probably two generations annually, with adults more abundant in Oct–Nov and Apr–May. **Habitat:** upland and lowland rainforest, where the larval food plants grow under the closed canopy. **Status:** uncommon, local and restricted to the Wet Tropics, QLD. **Larval food plants:** usually *Neolitsea dealbata* and *Litsea leefeana*; also *Cryptocarya grandis, Cryptocarya* sp. aff. *rigida, Endiandra compressa, *Cinnamomum camphora.*

Banded Dusk-flat *Chaetocneme critomedia*

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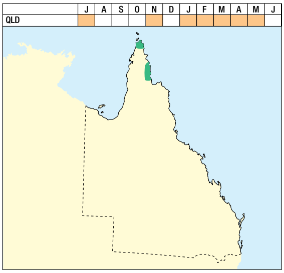
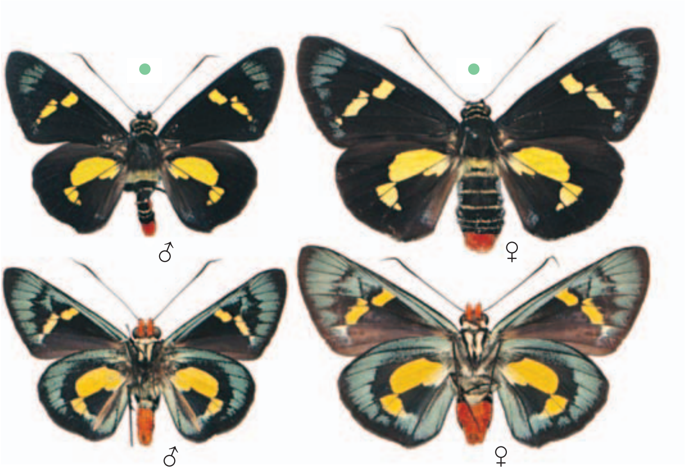
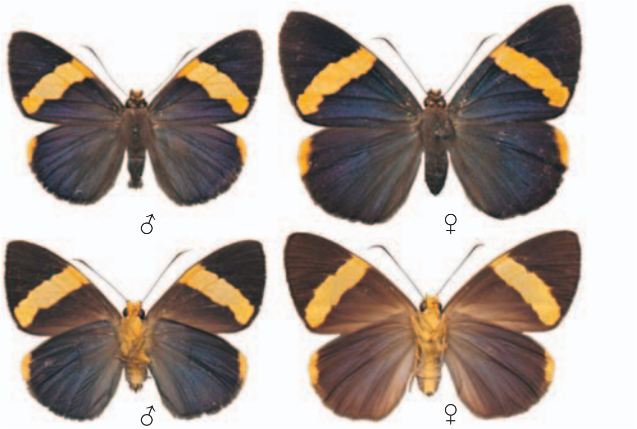
QLD	🟧				🟧		🟧	🟧	🟧	🟧	🟧	



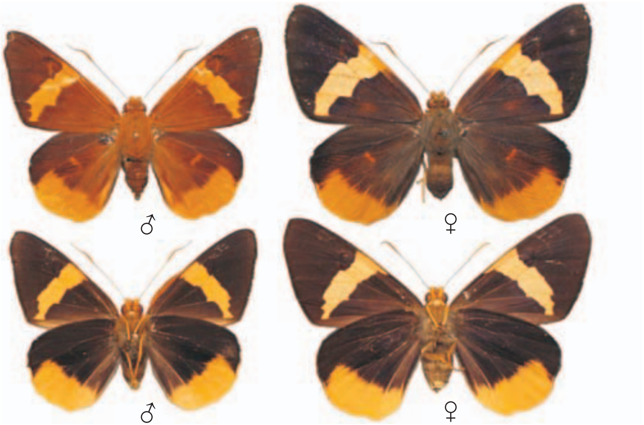
Other name: Banded Red-eye. **Wingspan:** ♂ 50 mm, ♀ 52 mm. **Similar species:** Purple Dusk-flat. The Banded Dusk-flat has the upper and underside ground colour brown with a broad orange tornal band on the HW. **Behaviour:** adults are apparently crepuscular or even partly nocturnal, and are frequently collected at light after dusk. They also emerge at dusk when the immature stages are reared in captivity. Number of generations completed annually not recorded. **Habitat:** coastal riparian closed-forest, rainforest edge and open-forest, where the larval food plants grow. **Status:** rarely seen and restricted to Cape York Peninsula, QLD. **Larval food plants:** *Blephocarya, Macaranga, Mallotus, Cinnamomum, Cryptocarya, Endiandra, Litsea, Neolitsea, Syzygium, Commersonia, *Annona.*



Regent Skipper

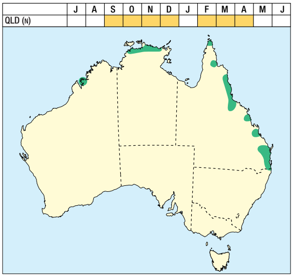


Purple Dusk-flat



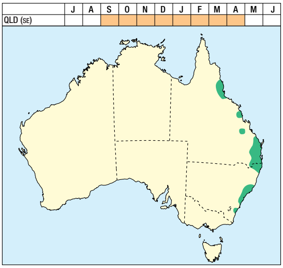
Banded Dusk-flat

Ornate Dusk-flat *Chaetocneme denitza*



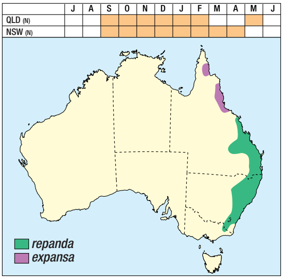
Other name: Rare Red-eye. **Wingspan:** ♂ 44 mm, ♀ 58 mm. **Similar species:** Eastern Dusk-flat, Bronze Flat. Ornate Dusk-flat males have blue-grey veins on the upperside, the FW subtornal spot more inward, and white subapical spots on the FW compared to Eastern Dusk-flat males. The FW termen is rounded, and the eyes are red compared to the Bronze Flat. **Behaviour:** adults are crepuscular or even partly nocturnal, and they emerge at or shortly after dusk when reared in captivity; during the day they have been collected at rest, with wings outspread and flattened against the underside of leaves, several metres above the ground. Females have occasionally been collected by light at night. Two generations annually, with adults emerging mainly in Sep–Oct and again in Mar–Apr in n. QLD, or in Nov–Feb in se. QLD. **Habitat:** eucalypt open-forest and savannah woodland in coastal and subcoastal areas, where the larval food plants grow. **Status:** rarely seen but widespread. **Larval food plants:** usually *Planchonia careya* in n. QLD; also *Eucalyptus, Lophostemon confertus, L. grandiflorus, L. suaveolens.*

Eastern Dusk-flat *Chaetocneme beata*

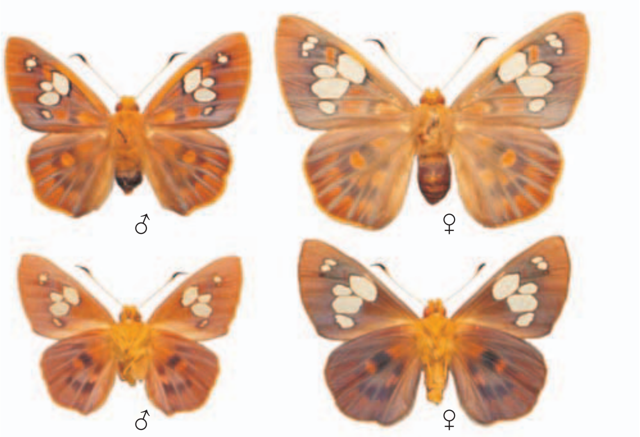


Other name: Common Red-eye. **Wingspan:** ♂ 47 mm, ♀ 52 mm. **Similar species:** Ornate Dusk-flat, Bronze Flat. Eastern Dusk-flat males have veins brown on the upperside, and the FW subtornal spot more outward compared to Ornate Dusk-flat males. The FW termen is rounded, and the eyes are red compared to the Bronze Flat. **Behaviour:** adults are crepuscular, and males have been observed visiting hilltops at dusk; during the day they may be found at rest on underside of leaves. Both sexes, especially females, are often attracted to light after dusk. Two generations annually in se. QLD, with adults emerging mainly in Sep–Oct and Jan–Feb. **Habitat:** usually rainforest, preferring moister gullies and more sheltered slopes where the larval food plants grow, or edges of upland rainforest or tall open-forest in n. QLD; also more open habitats and suburban areas in Brisbane and cc. NSW. **Status:** common but local. **Larval food plants:** usually *Cryptocarya, Litsea, Neolitsea*; also *Croton, Eupomatia, Acmena, Lophostemon, Melicope, Exocarpos, Commersonia, Toechima, *Annona, *Cinnamomum camphora, *Hibiscus.*

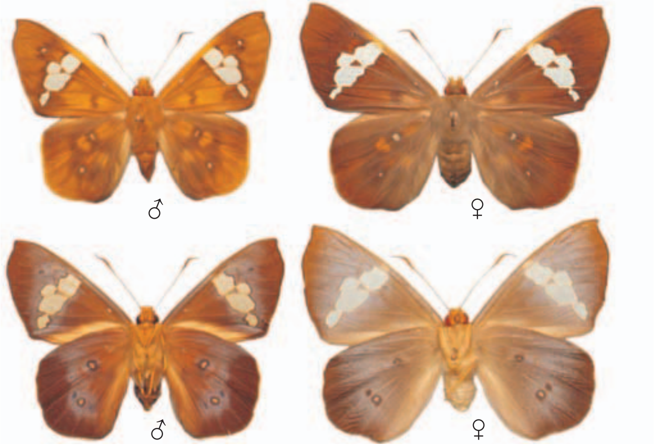
Bronze Flat *Netrocoryne repanda*



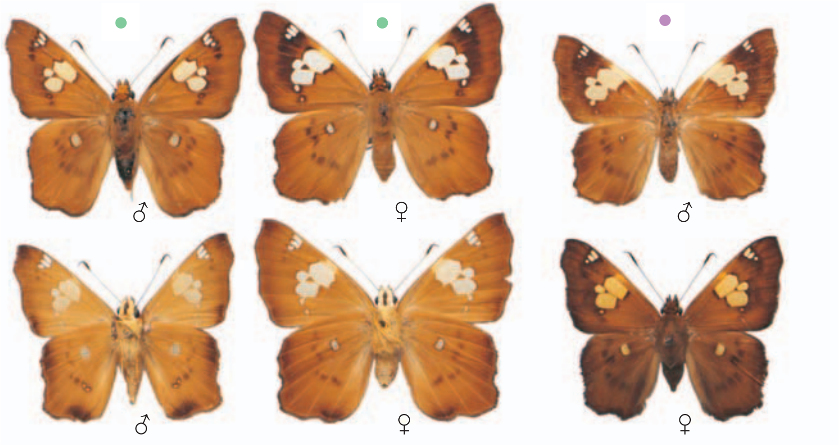
Other name: Eastern Flat. **Wingspan:** ♂ 39 mm, ♀ 41 mm. **Similar species:** Ornate Dusk-flat, Eastern Dusk-flat. The Bronze Flat has the FW termen crenate, the HW square-shaped, and the eyes brown. **Variation:** two subspecies. **Behaviour:** adults fly rapidly and occasionally glide short distances with wings outspread. Males hilltop during the morning in open forested areas and establish territories by perching on shrubs and bushes close to the ground; when settled the wings are held outspread towards the sun; later in the day they usually settle in shade on the underside of leaves with wings widely expanded. Probably two generations annually in QLD and NSW; only one generation in ACT and VIC, with adults flying in summer. **Habitat:** usually upland and lowland rainforest; also drier eucalypt open-forest and woodland, particularly in ACT and e. VIC where kurrajongs grow. **Status:** common but local. **Larval food plants:** *Callicoma, Elaeocarpus, Scolopia, Cryptocarya, Endiandra, Litsea, Neolitsea, Acmena, Lophostemon, Notelaea, Alectryon, Argyrodendron, Brachychiton, *Prunus.*



Ornate Dusk-flat

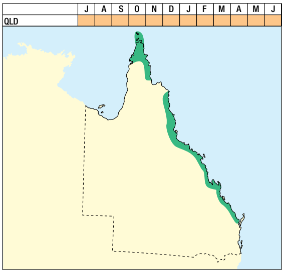


Eastern Dusk-flat



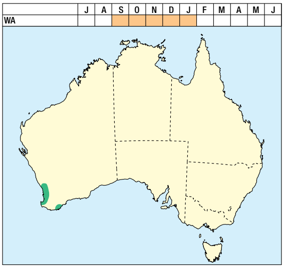
Bronze Flat

Pied Flat *Tagiades japetus*



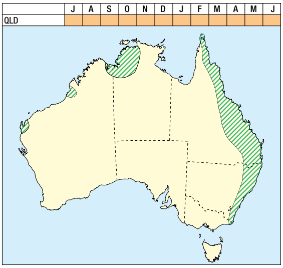
Other name: Black and White Flat. **Wingspan:** ♂ 37 mm, ♀ 40 mm. **Similar species:** none. The Pied Flat has the FW dark brown, and a broad white patch on the HW. **Behaviour:** adults fly rapidly, usually close to ground, and bask in the morning sunlight with wings widely expanded; they may also be observed feeding at flowers of *Stachytarpheta* growing in disturbed areas during the morning; at rest they settle in the shade beneath a leaf, with head oriented downwards and wings held flat. Probably several generations completed annually. Breeding occurs continuously throughout the year, but adults are abundant seasonally, being more numerous late in the wet season. **Habitat:** usually edges of rainforest and monsoon forest (vine thicket), where the larval food plant grows; during the dry season breeding is limited to riparian closed-forest. **Status:** common but local. **Larval food plant:** *Dioscorea transversa*.

Western Flat *Exometoeca nycteris*

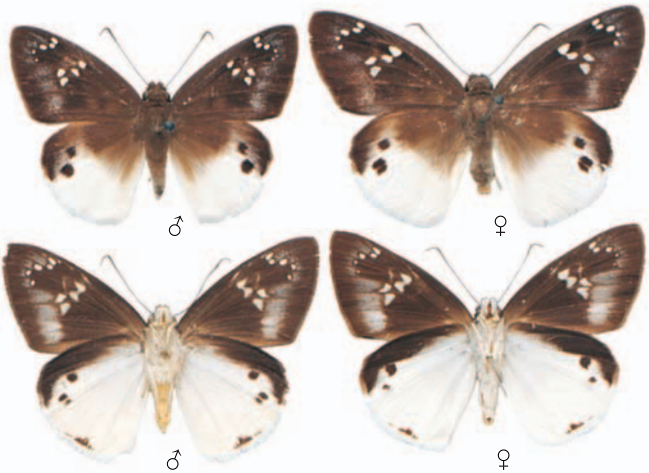


Wingspan: ♂ 27 mm, ♀ 27 mm. **Similar species:** none. The Western Flat has the upperside colour rich golden-brown, and a dark brown subterminal band suffused with purple on the FW underside. **Behaviour:** adults fly rapidly during sunshine, close to ground; they are active throughout much of the day, from about mid morning to mid afternoon; when perched, basking or feeding they settle upside-down with the wings widely expanded and spread flat, exposing the FW underside apical area; they feed on flowers of *Pimelea* and *Dasypogon*. Males establish territories in open areas by perching on prominent dead sticks and blades of taller sedges. One generation annually, with adults emerging mainly in Oct near Perth, or from late Nov to early Dec near Albany. **Habitat:** mixed jarrah-sheoak low woodland with patches of wet open-heath near Albany; marri-wandoo open-woodland with a diverse Proteaceae understorey on west-facing slopes of the Darling Scarp near Perth. **Status:** uncommon, very local and restricted to sw. WA, at Albany and from Margaret River to Chittering. **Larval food plants:** *Tetratheca hispidissima* near Albany, *T. hirsuta* at Lesmurdie near Perth.

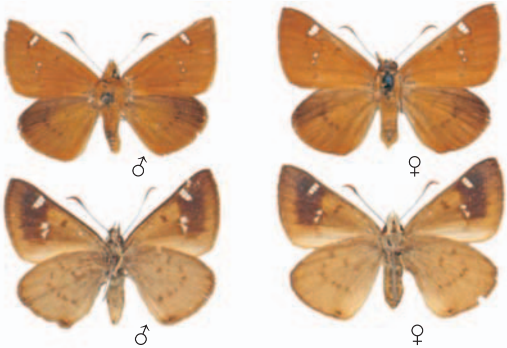
Narrow-winged Awl *Badamia exclamationis*



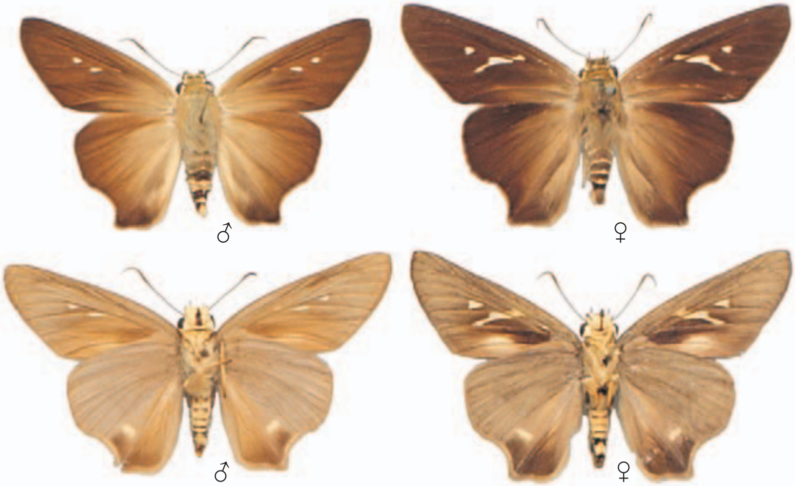
Other names: Brown Awl, Migratory Skipper. **Wingspan:** ♂ 48 mm, ♀ 52 mm. **Similar species:** none. The Narrow-winged Awl has the FW narrowed and elongate, and the HW termen strongly concaved near the tornus. **Behaviour:** adults fly extremely rapidly, pausing briefly to feed from flowers; during very hot weather they usually rest in dense shaded areas on underside of leaves with wings closed, or drink from moist sand along margins of creeks. Adults are migratory and breed seasonally from late Sep to early Jan in QLD when they arrive during annual southerly movements; northerly flights occur between mid Jan and early Apr. **Habitat:** wide variety of habitats, but mainly in drier subcoastal areas where the larval food plants grow, which are deciduous during the dry season; also suburban areas. **Status:** very common and widespread. **Larval food plants:** usually new soft leaves of *Terminalia oblongata* in drier subcoastal areas of QLD; *T. catappa* in moister coastal areas of QLD; also *T. sericocarpa*, *Pongamia pinnata*, *Rhyssopterys timorensis*.



Pied Flat

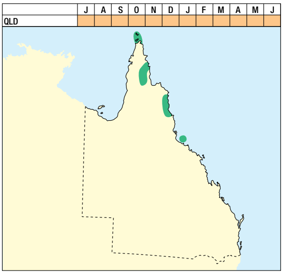


Western Flat



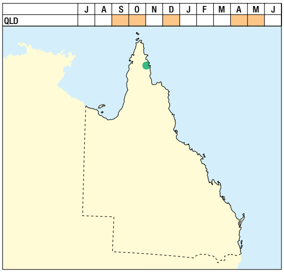
Narrow-winged Awl

Peacock Awl *Allora doleschallii*



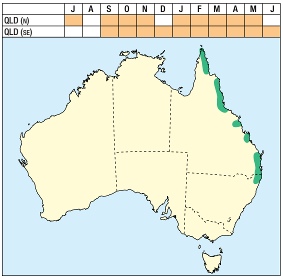
Wingspan: ♂ 40 mm, ♀ 42 mm. **Similar species:** Greater Peacock Awl, Blue-flash Skipper. The Peacock Awl has the FW underside white subtornal patch smaller and further away from the white cell spot than in the Greater Peacock Awl. It is larger and has the HW tornus slightly produced compared to the Blue-flash Skipper. **Behaviour:** adults fly rapidly throughout the day, usually within 4 m of the ground and near the larval food plant. At some locations males have been recorded on hilltops. Probably several generations completed annually. Breeding occurs throughout the year, but adults are more abundant in the late wet season when they appear to undertake local range expansion. During the dry season populations contract to breed in moister areas, such as along watercourses, where the food plant continues to produce new foliage. **Habitat:** usually monsoon forests (vine thicket, riparian vine forest), where the larval food plant grows as a semi-deciduous woody climber. **Status:** common but local. **Larval food plant:** *Rhyssopterys timorensis*.

Greater Peacock Awl *Allora major*

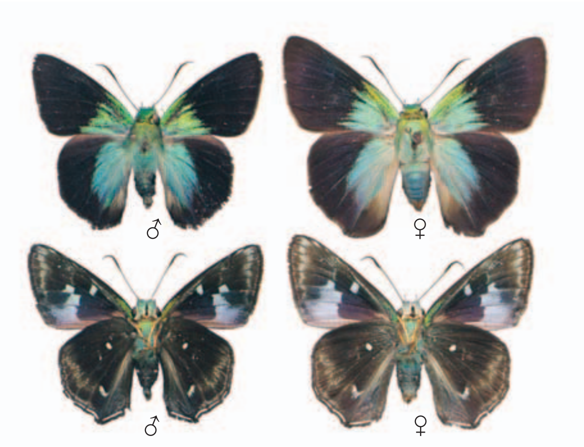


Wingspan: ♂ 43 mm, ♀ 49 mm. **Similar species:** Peacock Awl, Blue-flash Skipper. The Greater Peacock Awl often has a series of subapical spots on the FW underside, a small white subapical spot on the HW underside, and the FW underside white subtornal patch larger and closer to the white cell spot than in the Peacock Awl. It is larger and has the HW tornus slightly produced compared to the Blue-flash Skipper. **Behaviour:** males fly in the forest canopy, 10–15 m above the ground. They have been observed along the edges of tracks where they perch on particular leaves or vine tendrils for long periods, presumably establishing mating territories. Number of generations completed annually not recorded. **Habitat:** adults have been collected in tropical rainforest. **Status:** uncommon and restricted to Iron Range on Cape York Peninsula, QLD. **Larval food plant:** not recorded. Possibly *Corynocarpus cribbianus*.

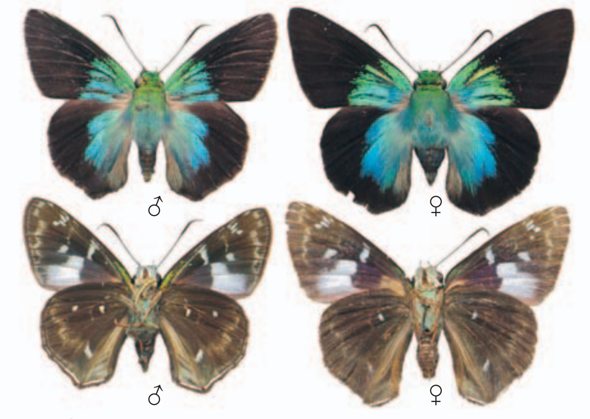
Green Awl *Hasora discolor*



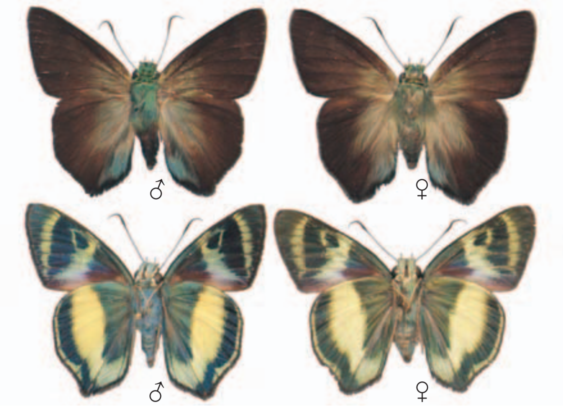
Wingspan: ♂ 42 mm, ♀ 43 mm. **Similar species:** none. The Green Awl has a broad pale yellow band on the HW underside; males lack a sex-brand. **Behaviour:** adults fly rapidly during sunshine, usually in the morning; they are often observed settled beneath a leaf a few metres above the ground where they hang upside down with wings closed; they drink from dew drops and nectar of flowers such as *Lantana*. Probably several generations completed annually. **Habitat:** edges of lowland tropical, subtropical and littoral rainforest, where the native larval food plant grows as a vine. **Status:** generally uncommon and local. **Larval food plants:** usually soft new leaves of *Mucuna gigantea*; occasionally **Mucuna novoguineensis*.



Peacock Awl

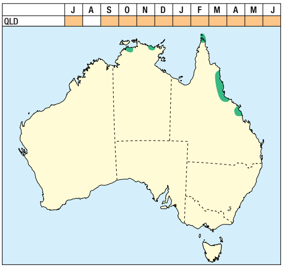


Greater Peacock Awl



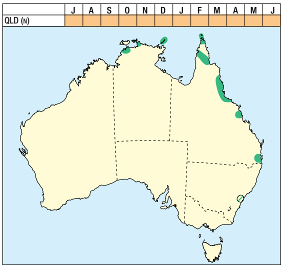
Green Awl

Broad-banded Awl *Hasora hurama*



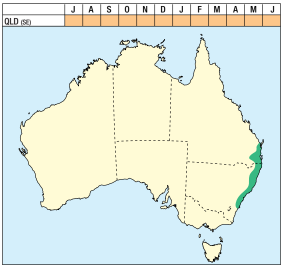
Wingspan: ♂ 43 mm, ♀ 44 mm. **Similar species:** Narrow-banded Awl, Chrome Awl. The Broad-banded Awl has the HW underside white band usually broader and not broken at the tornus. **Behaviour:** adults fly rapidly, sometimes in the dark shade of rainforest; when settled they usually rest upside down beneath a leaf with wings closed. Females are usually more active during the late afternoon. Probably several generations completed annually. **Habitat:** usually the landward edges of mangrove in coastal areas, where the larval food plant grows as a vine; also rainforest in upland areas in QLD and monsoon forest in NT. **Status:** generally uncommon and local. **Larval food plant:** new soft leaves of *Derris trifoliata*.

Chrome Awl *Hasora chromus*

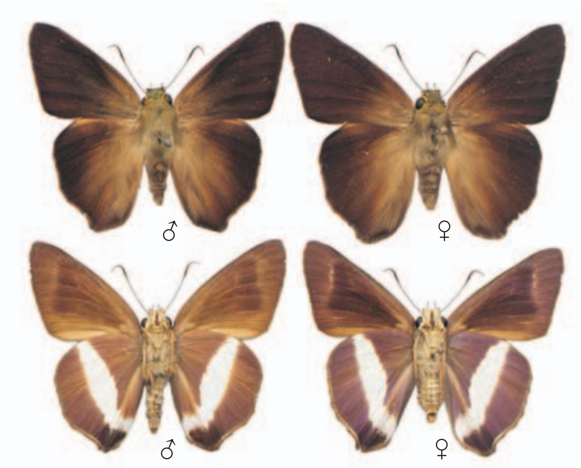


Other name: Common Banded Awl. **Wingspan:** ♂ 42 mm, ♀ 43 mm. **Similar species:** Broad-banded Awl, Narrow-banded Awl. The Chrome Awl has the HW underside white band usually narrower and broken at the tornus compared to the Broad-banded Awl; females have two cream central spots on the FW. The HW underside white band is usually broader with an indistinct outer edge and a darker tornal patch compared to the Narrow-banded Awl. **Behaviour:** adults fly very rapidly and readily feed from flowers; they sometimes settle, upside down with wings closed, beneath a leaf. Males frequently perch high up on outer foliage of the larval food plant, often 5–6 m above the ground. At Townsville, QLD, adults breed seasonally during the late dry season (Oct or Nov) when the larval food plant produces new growth; populations are temporary and possibly migratory. **Habitat:** littoral rainforest and monsoon forest (including coastal vine thicket), where the larval food plant, which is often deciduous during the dry season, grows; also suburban areas where the food plant is widely planted as a street tree. **Status:** common but local. **Larval food plant:** new soft leaves of *Pongamia pinnata*.

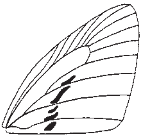
Narrow-banded Awl *Hasora khoda*

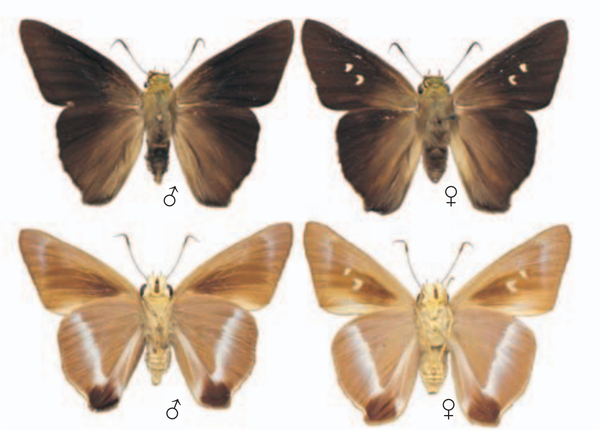


Other name: Large Banded Awl. **Wingspan:** ♂ 43 mm, ♀ 44 mm. **Similar species:** Chrome Awl, Broad-banded Awl. The Narrow-banded Awl has the underside ground colour dull brown without lilac or purple sheen; males have a different sex-brand. The HW underside white band is usually narrower and a paler tornal patch compared to the Chrome Awl. **Behaviour:** adults fly rapidly throughout the day, although are more active during early morning, late afternoon and at dusk; during hot conditions they rest in shade beneath a leaf or under buildings. Males establish territories by perching on leaves on the outer foliage of shrubs 2–6 m above the ground. In cc. NSW, adults aggregate in warm, moist sheltered gullies during winter when the introduced food plant is deciduous. Probably several generations completed annually, with adults more abundant in summer. **Habitat:** subtropical rainforest, warm temperate rainforest and littoral rainforest, where the native larval food plant grows; also subcoastal upland areas in se. QLD and suburban gardens. **Status:** generally uncommon and local. **Larval food plants:** new soft leaves of *Millettia megasperma* in ne. NSW; cultivated **Wisteria sinensis* at Brisbane and cc. NSW.

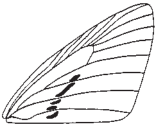


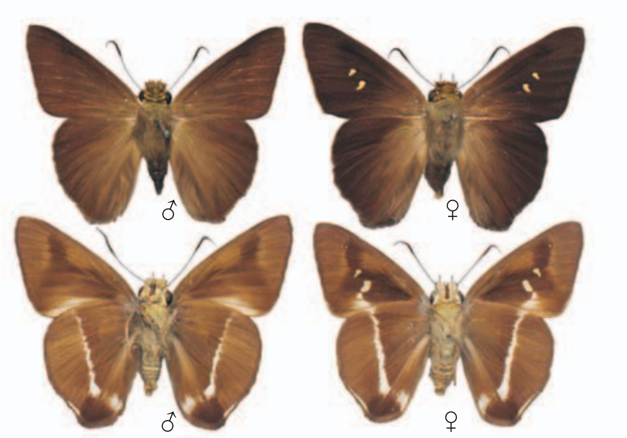
Broad-banded Awl



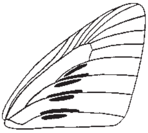


Chrome Awl



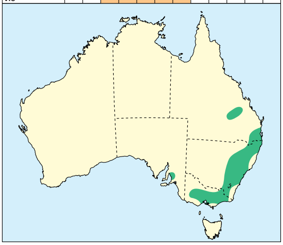


Narrow-banded Awl



Heath Ochre *Trapezites phigalia*

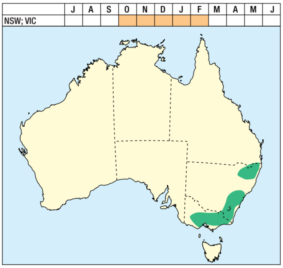
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)		🟧	🟧	🟧	🟧	🟧						
VIC			🟧	🟧	🟧	🟧	🟧					



Other name: Phigalia Skipper. **Wingspan:** ♂ 29 mm, ♀ 31 mm. **Similar species:** Montane Ochre, Northern Silver Ochre, Southern Silver Ochre. The Heath Ochre has the FW upperside central area darker brown, and the FW subapical band of spots in a straight line compared to the Montane Ochre. Females have the FW underside cell bright orange-yellow compared to Northern Silver and Southern Silver Ochre females. **Behaviour:** adults fly rapidly close to ground and often visit flowers, especially *Pimelea*. Males frequently hilltop and establish small territories by perching on rocks, dead branches, bare patches on the ground, or sometimes on small shrubs. One generation annually, with adults emerging mainly in Sep and Oct. **Habitat:** eucalypt woodland and open-forest in the foothills and slopes of and near the Great Dividing Range; also dry coastal heathland and woodland. **Status:** common but local; vulnerable in SA, known only from Mt Lofty Ranges. **Larval food plants:** *Lomandra densiflora, L. fibrata, L. filiformis, L. glauca, L. multiflora, L. nana, L. obliqua, L. sororia*.

Montane Ochre *Trapezites phigalioides*

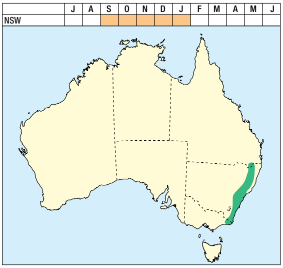
	J	A	S	O	N	D	J	F	M	A	M	J
NSW; VIC				🟧	🟧	🟧	🟧	🟧				



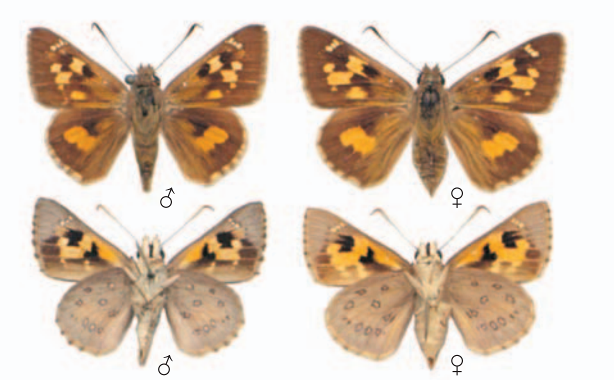
Other name: Phigalioides Skipper. **Wingspan:** ♂ 29 mm, ♀ 31 mm. **Similar species:** Heath Ochre, Northern Silver Ochre, Southern Silver Ochre, Silver-studded Ochre. The Montane Ochre has the FW upperside colour uniformly brown, and the FW subapical band of spots in an irregular line compared to the Heath Ochre. Females have the FW underside cell bright orange-yellow compared to Northern Silver and Southern Silver Ochre females. **Behaviour:** males fly swiftly during sunshine, close to ground; they regularly hilltop and establish territories by perching on twigs, leaf litter, rocks and bare patches on the ground; they also frequently feed from flowers such as *Pimelea* and *Helichrysum*. One generation annually, with adults emerging mainly in Nov and Dec. **Habitat:** eucalypt open-forest on and near the Great Dividing Range, usually between 300–1400 m, extending into subalpine woodland in c. and n. NSW and ACT (up to 1600 m); also near sea level near Sydney and Melbourne. **Status:** common but local. **Larval food plant:** *Lomandra filiformis*.

Silver-studded Ochre *Trapezites iacchoides*

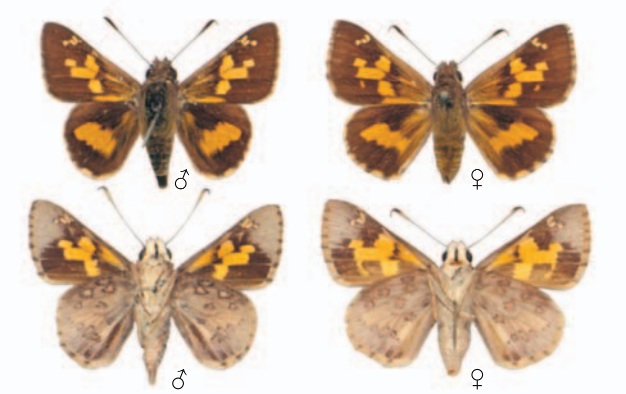
	J	A	S	O	N	D	J	F	M	A	M	J
NSW			🟧	🟧	🟧	🟧	🟧					



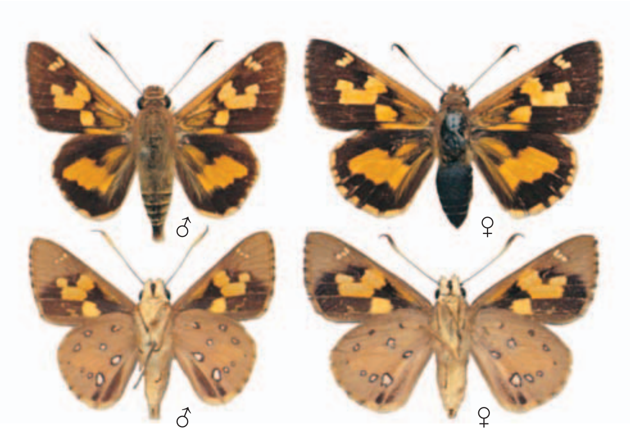
Other name: Iacchoides Skipper. **Wingspan:** ♂ 33 mm, ♀ 38 mm. **Similar species:** Heath Ochre, Northern Silver Ochre, Southern Silver Ochre, Montane Ochre. The Silver-studded Ochre is larger, has prominent silvery-white spots on the HW underside, and a large, square-shaped yellow median spot near dorsum on the FW upperside. **Behaviour:** adults fly extremely rapidly during warm sunny conditions; they frequently feed from flowers such as *Pimelea*, particularly females. Males regularly hilltop and establish territories by perching on foliage of low shrubs and dead branches up to 1.5 m above the ground, or occasionally on bare patches on the ground. One generation annually, with adults emerging from Sep in coastal areas of c. and se. NSW to Nov in montane areas of n. NSW. **Habitat:** eucalypt open-forest on and near the Great Dividing Range in coastal and montane areas, preferring damp areas where the larval food plant grows; mainly in montane areas north of Gosford, NSW. **Status:** common but very local. **Larval food plant:** *Lomandra longifolia*.



Heath Ochre



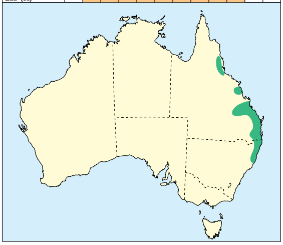
Montane Ochre



Silver-studded Ochre

Northern Silver Ochre *Trapezites maheta*

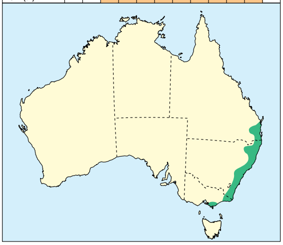
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (NE)			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		
QLD (SE)		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		



Other name: Maheta Skipper. **Wingspan:** ♂ 28 mm, ♀ 29 mm. **Similar species:** Southern Silver Ochre, Ornate Ochre, Heath Ochre, Montane Ochre. Northern Silver Ochre males have the underside ground colour paler grey-brown, and the HW underside anterior spot of the two submedian spots larger and more rounded compared to Southern Silver Ochre males. Females have the FW underside cell browner, and the HW underside rings less sharply defined compared to Heath Ochre and Montane Ochre females. **Behaviour:** adults fly swiftly, close to the ground; they readily feed from flowers of *Lantana*. Males solitary, patrol along tracks and clearings, often settle on dead twigs or branches 1–2 m above ground. Females usually found in damp, sheltered areas. Probably two generations annually, with adults most abundant in spring and autumn. **Habitat:** usually wet and dry eucalypt open-forest and coastal heathland (wallum); sometimes rainforest edge, particularly in ne. QLD; mainly upland areas in ne. QLD but below 500 m in ne. NSW. **Status:** uncommon and local. **Larval food plant:** *Lomandra hystrix*.

Southern Silver Ochre *Trapezites praxedes*

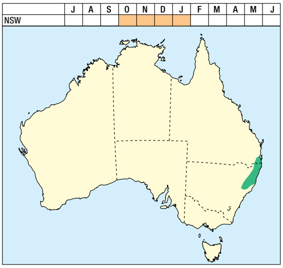
	J	A	S	O	N	D	J	F	M	A	M	J
QLD			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	
NSW (SE)			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	



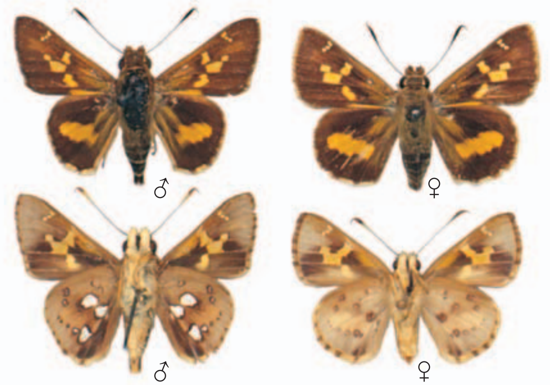
Other name: Praxedes Skipper. **Wingspan:** ♂ 29 mm, ♀ 30 mm. **Similar species:** Northern Silver Ochre, Ornate Ochre, Heath Ochre, Montane Ochre. Southern Silver Ochre males have the underside ground colour darker brown, the HW underside anterior spot of the two submedian spots smaller and crescent-shaped, and the HW underside apical postmedian spots poorly developed compared to Northern Silver Ochre males. Females have the FW underside cell browner, and the HW underside rings less sharply defined compared to Heath Ochre and Montane Ochre females. **Behaviour:** adults fly close to the ground and settle with wings partially closed; they feed from eucalypt flowers, often high in the canopy. At least two generations annually, with adults more abundant in spring and autumn. **Habitat:** usually coastal and subcoastal heathland, woodland or eucalypt open-forest with a dense heath understorey east of Great Dividing Range, mainly below 500 m, where the usual larval food plant grows as a prostrate, fine-leafed creeper. **Status:** uncommon and local. **Larval food plants:** usually *Lomandra obliqua* in cc. NSW; occasionally *L. confertifolia, L. longifolia*.

Ornate Ochre *Trapezites genevieveae*

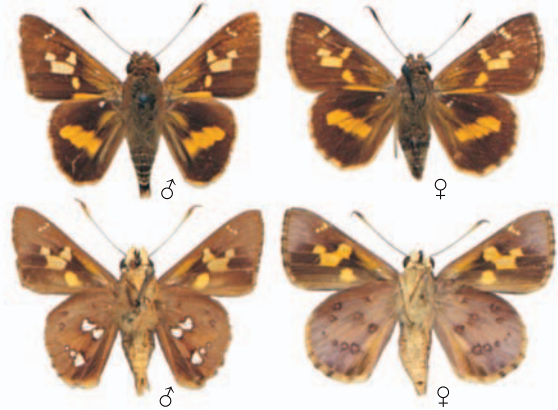
	J	A	S	O	N	D	J	F	M	A	M	J
NSW				🟧	🟧	🟧	🟧					



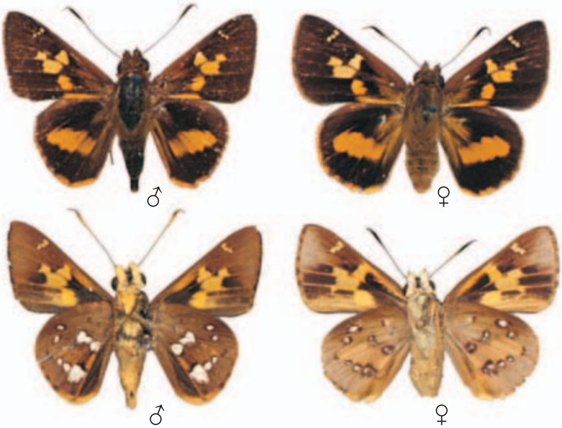
Wingspan: ♂ 30 mm, ♀ 32 mm. **Similar species:** Southern Silver Ochre, Northern Silver Ochre. The Ornate Ochre has a broad yellow outward suffusion near the dorsum on the FW underside; males have the HW underside two small postmedian spots between veins Sc+R$_1$ and M$_1$ silver; females have the HW underside postmedian spots often centred with white. **Behaviour:** adults fly in sunny patches or openings and settle in sunlit glades; they may visit *Lantana* flowers during the early morning and late afternoon. Males fly in the upper or mid-canopy and establish territories by perching in selected spots. Females fly closer to ground near larval food plant. One generation annually, with adults most abundant in Dec. **Habitat:** upland warm temperate rainforest and lowland subtropical rainforest in montane and subcoastal areas east of Great Dividing Range, between 200–800 m, where the larval food plant grows in damp shaded areas such as valleys, sheltered slopes, ravines and gorges. **Status:** rare and local. **Larval food plant:** *Lomandra spicata*.



Northern Silver Ochre

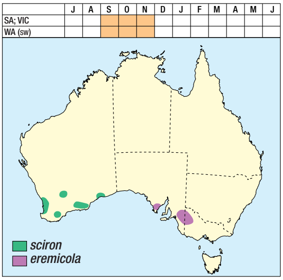


Southern Silver Ochre



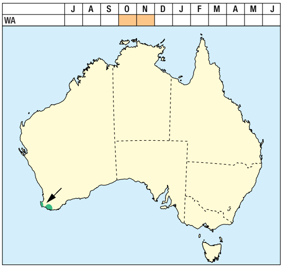
Ornate Ochre

Sciron Ochre *Trapezites sciron*



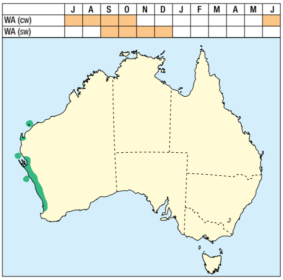
Other names: Mallee Ochre, Sciron Skipper. **Wingspan:** ♂ 28 mm, ♀ 30 mm. **Similar species:** Speckled Ochre. The Sciron Ochre usually has the FW upperside yellow markings less conspicuous and paler, the HW underside white spots smaller, and the underside ground colour darker. **Variation:** two subspecies. **Behaviour:** adults fly rapidly close to the ground and feed from flowers, including *Boronia* and *Dasypogon*. Males frequently hilltop on crests of sand ridges and sand dunes where they settle on the ground in open patches of sand to establish territories; they also establish territories by perching in the lee of larger shrubs or in open bare patches near the larval food plant. Females usually observed at or near the breeding areas. One generation annually, with adults emerging in Sep and Oct. **Habitat:** heathland and mallee open-heath in VIC and SA, especially on or near sand dunes where the larval food plant grows; banksia woodland and jarrah open-forest near Perth. **Status:** generally uncommon and very local. **Larval food plants:** *Lomandra collina* in nw. VIC and se. SA; *L. caespitosa*, *Acanthocarpus canaliculatus* in WA.

Speckled Ochre *Trapezites atkinsi*

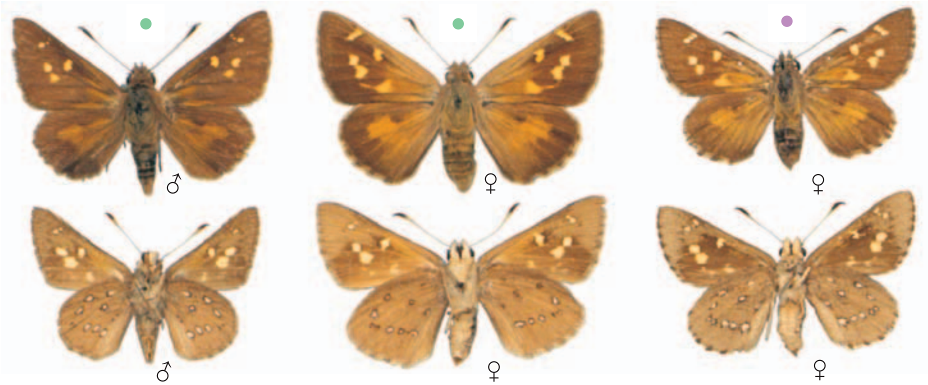


Other name: Heath Ochre. **Wingspan:** ♂ 29 mm, ♀ 30 mm. **Similar species:** Sciron Ochre, Silver-spotted Ochre. The Speckled Ochre usually has the FW upperside yellow markings more conspicuous and richer, a prominent yellow-orange central patch on the HW upperside, the underside ground colour paler, and the HW underside silvery-white spots larger compared to the Sciron Ochre; however, some specimens are indistinguishable. The HW underside silvery-white spots are smaller than in the Silver-spotted Ochre. **Behaviour:** adults fly very rapidly during sunshine, close to ground; they often settle in sheltered patches on sand, sticks or rocks. Males patrol ridges of sand dunes or along cliff-tops. Females fly further down slope of cliff-face, sometimes close to the beach or in dune swales amongst clumps of larval food plant. One generation annually, with adults emerging in Oct and Nov. **Habitat:** wind-pruned coastal heathland on rocky limestone cliffs, sand dunes and dune swales behind beaches, where clumps of the larval food plant grow. **Status:** common but local and restricted to coastal sw. WA. **Larval food plant:** *Acanthocarpus preissii*.

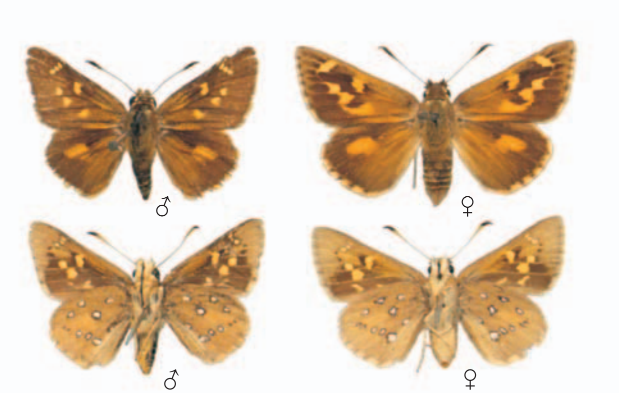
Silver-spotted Ochre *Trapezites argenteoornatus*



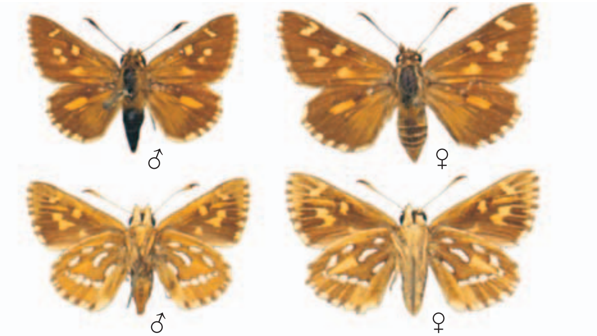
Other names: Silver-chequered Ochre, Silver-spotted Skipper. **Wingspan:** ♂ 25 mm, ♀ 29 mm. **Similar species:** Speckled Ochre. The Silver-spotted Ochre has the scale-fringe chequered brown and white, the HW upperside orange-yellow central patch narrower, the underside ground colour yellowish-brown or dark brown, and the HW underside silvery-white spots larger and often forming a broken ring or band. **Behaviour:** adults fly rapidly close to the ground amongst clumps of the larval food plant; they feed readily from flowers, including *Senecio* and *Conostylis*. Possibly one generation annually, with adults most abundant in Nov near Perth; flight period starts earlier in Jun or Jul in cw. WA. **Habitat:** usually heathland in coastal areas, where the larval food plants grow as low spreading plants on sandy soil; also open-woodland in inland areas at Watheroo National Park and Mingenew, WA. **Status:** common but local. **Larval food plants:** usually *Acanthocarpus preissii*; also *A. robustus, A. verticillatus*.



Sciron Ochre

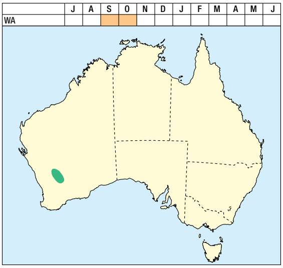


Speckled Ochre



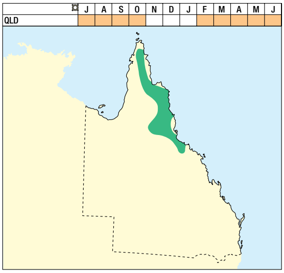
Silver-spotted Ochre

Laterite Ochre *Trapezites waterhousei*



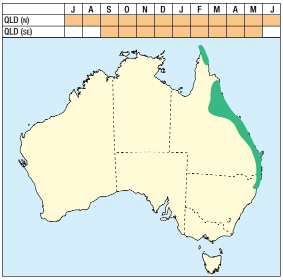
Other names: Mottled Ochre, Waterhouse's Skipper. **Wingspan:** ♂ 25 mm, ♀ 27 mm. **Similar species:** none. The Laterite Ochre has the HW underside ground colour greyish-brown mottled with prominent white spots edged with dark brown. **Variation:** size and intensity of the FW upperside spots and the HW underside spots vary. **Behaviour:** adults fly close to the ground and establish territories by frequently perching on rocks and bare ground; when settled with wings closed they are very difficult to detect. Probably one generation annually, with adults flying in Sep and Oct. **Habitat:** exposed acacia shrubland and eucalypt open-woodland, where the larval food plant grows as a small almost leafless herb on remnant decaying granite and laterite rocky outcrops. **Status:** generally uncommon, very local and restricted, currently known from only 11 fragmented populations in the extensive wheat belt of the semi-arid zone. **Larval food plant:** *Xerolirion divaricata*.

Bronze Ochre *Trapezites macqueeni*

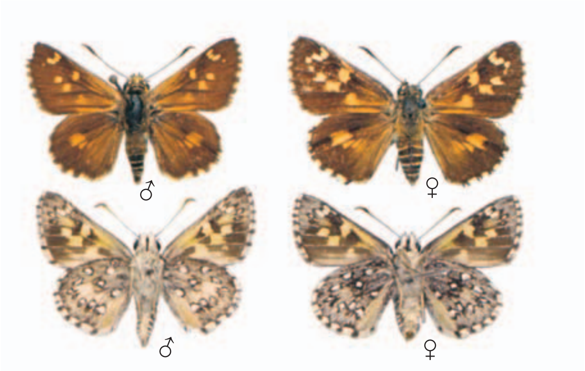


Other name: Macqueen's Skipper. **Wingspan:** ♂ 28 mm, ♀ 30 mm. **Similar species:** none. Bronze Ochre males have the upperside colour rich brown suffused with bronze. Females have the upperside dark brown, weakly suffused with yellow, with three yellow central spots and a median yellow spot near the dorsum on the FW. **Behaviour:** adults fly swiftly, close to the ground. Males commonly hilltop, usually around midday, and normally perch low down just below the peak or highest point of the hill. Females are more often found near the larval food plant. Possibly several generations completed annually, although adults are more abundant in autumn. **Habitat:** drier eucalypt open-forests and woodlands on Cape York Peninsula, QLD, including the sandstone ranges near Laura, and to the west of the Wet Tropics, QLD, including the granite sloping country near the Atherton Tableland and Paluma, and as far inland as the Newcastle Range west of Einasleigh, preferring more open areas on the lower slopes of hills and ridges where the larval food plant grows as a diminutive, small leaved variety on sandy soil. **Status:** generally uncommon and very local. **Larval food plant:** *Lomandra filiformis*.

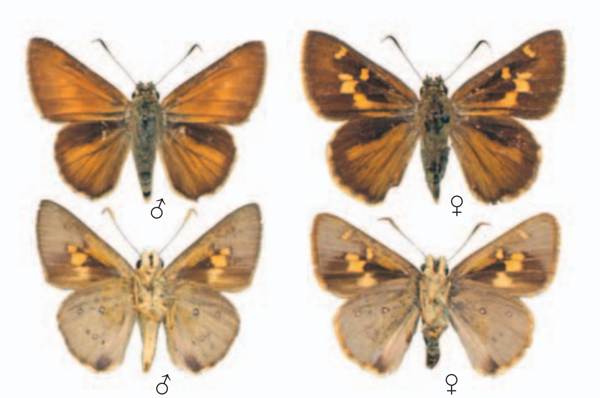
Brown Ochre *Trapezites iacchus*



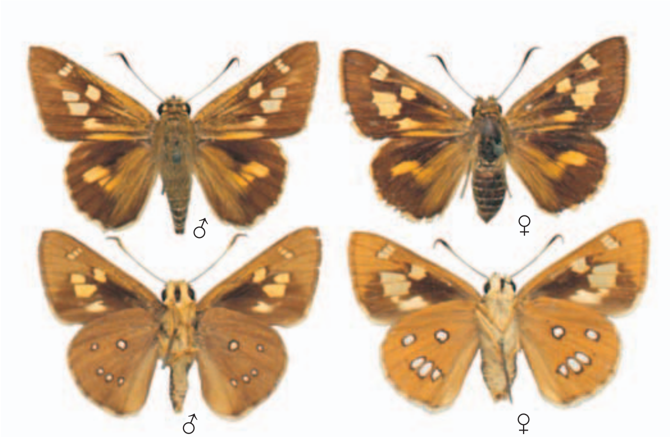
Other name: Iacchus Skipper. **Wingspan:** ♂ 33 mm, ♀ 34 mm. **Similar species:** Black-ringed Ochre. The Brown Ochre is larger, and has five conspicuous white spots on the HW underside. **Behaviour:** adults fly very rapidly, usually close to the ground. Males frequently hilltop during mid to late afternoon; they establish territories by perching close to the ground on rocks, herbs and grasses, with the wings slightly opened. Probably two or more generations annually. **Habitat:** eucalypt open-forest and savannah woodland, particularly along stream-banks in the more inland areas of n. QLD where the larval food plants grow; extends as far west as the Newcastle Range west of Einasleigh and the Great Dividing Range north and north-east of Hughenden, including Porcupine Gorge and the White Mountains-Burra Range. **Status:** common but local. **Larval food plants:** *Lomandra hystrix*, *L. longifolia*, *L. multiflora*.



Laterite Ochre

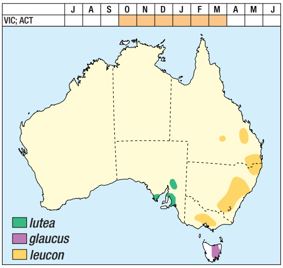


Bronze Ochre



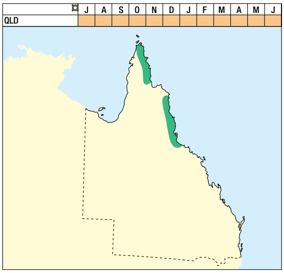
Brown Ochre

Yellow Ochre *Trapezites lutea*



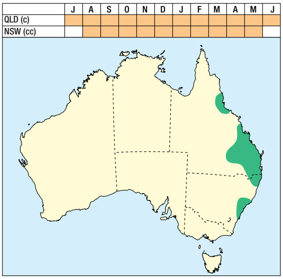
Other name: Rare White-spot Skipper. **Wingspan:** ♂ 27 mm, ♀ 31 mm. **Similar species:** Black-ringed Ochre. The Yellow Ochre has the HW underside ground colour yellow, with the white spot enclosed by a narrow black ring. **Variation:** three subspecies. **Behaviour:** adults fly close to ground near the larval food plants and frequently perch on the ground or low growing herbs. Males do not hilltop. One generation annually, with adults flying mainly in Oct–Nov, often followed by a partial second generation in late summer and autumn on the mainland. Adults are more abundant in Nov and Jan in TAS. **Habitat:** eucalypt woodland, cypress-pine open-woodland and grassland on the drier slopes and tablelands of and inland of the Great Dividing Range, preferring very open grassy areas where the larval food plants grow; also along river plains in cc. NSW, and subalpine woodland (up to 1700 m) in ACT. **Status:** uncommon and very local; lower risk in VIC and SA. **Larval food plants:** usually *Lomandra filiformis* in c. NSW and VIC, *L. longifolia* in TAS; also *L. confertifolia*, *L. densiflora*, *L. multiflora* in NSW and SA.

Small Orange Ochre *Trapezites heteromacula*

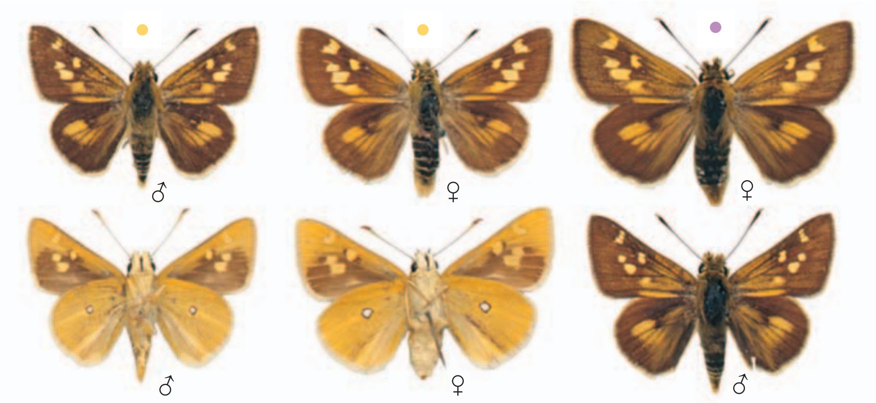


Other names: Orange White-spot Skipper, Northern White-spot Skipper. **Wingspan:** ♂ 26 mm, ♀ 27 mm. **Similar species:** Orange Ochre. The Small Orange Ochre is smaller, has the termen of both wings less rounded, especially males, and the HW underside central spot with a broader black edge. **Behaviour:** adults fly close to the ground and often perch on stems and leaves of grasses. Males frequently hilltop and perch just below the summit. Probably several generations completed annually, with adult abundance varying seasonally. **Habitat:** eucalypt open-forest, eucalypt woodland and paperbark woodland in coastal lowlands, where the usual larval food plant grows; also drier subcoastal elevated areas up to 500 m near Coen and in the Wet Tropics, QLD. **Status:** generally uncommon and very local. **Larval food plants:** usually *Lomandra filiformis*; rarely *L. longifolia*.

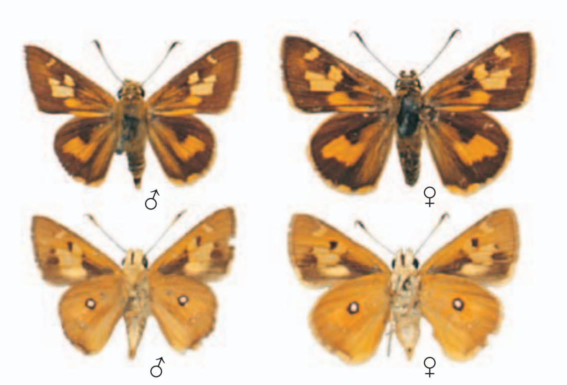
Black-ringed Ochre *Trapezites petalia*



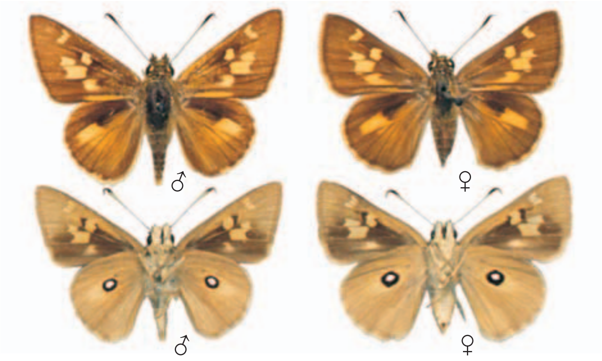
Other name: Common White-spot Skipper. **Wingspan:** ♂ 28 mm, ♀ 29 mm. **Similar species:** Yellow Ochre, Brown Ochre. The Black-ringed Ochre has the HW underside ground colour pale greyish-yellow, with the single white spot enclosed by a broad ring of black. **Behaviour:** males regularly visit hilltops where they establish territories by repeatedly perching in open areas on rocks or bare patches on the ground. Two generations annually in cc. NSW, but possibly several generations in n. QLD. **Habitat:** savannah woodland and drier eucalypt open-forests, often with a heath understorey, from the coast to elevated areas on and near the Great Dividing Range, preferring banks of ephemeral streams where the larval food plant grows at the base of eucalypt trees in n. QLD; extends as far inland as Carnarvon Range in c. QLD. **Status:** common but local. **Larval food plants:** usually *Lomandra multiflora* in n. QLD and NSW; also *L. filiformis*, *L. longifolia*.



Yellow Ochre



Small Orange Ochre

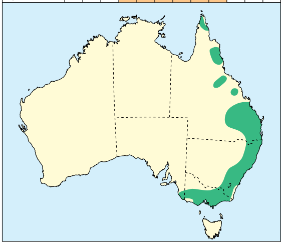


Black-ringed Ochre

Orange Ochre *Trapezites eliena*

Other name: Eliena Skipper. **Wingspan:** ♂ 33 mm, ♀ 37 mm. **Similar species:** Small Orange Ochre, Sandstone Ochre. The Orange Ochre is larger, has the termen of both wings more rounded, and the HW underside central spot with a narrower dark brown-black edge than in the Small Orange Ochre. HW underside postmedian spots small and discrete, rather than in a broad broken band, compared to the Sandstone Ochre. **Variation:** underside ground colour, and size and number of the HW underside spots vary. **Behaviour:** adults fly swiftly and frequently settle close to the ground. Males regularly hilltop and establish territories by perching on rocks, bare ground, low shrubs and branches. Two generations annually in montane se. QLD and cc. NSW. **Habitat:** eucalypt woodland and open-forest, often with a heath understorey, from coastal to montane areas of and near the Great Dividing Range, up to 1200 m. **Status:** common but local; rare in SA. **Larval food plants:** *Lomandra confertifolia, L. filiformis, L. longifolia, L. multiflora*.

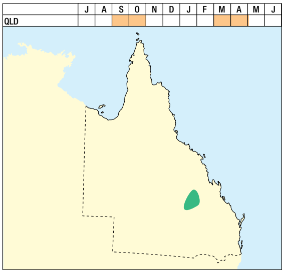
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (N)	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
VIC				🟧	🟧	🟧	🟧	🟧	🟧			



Sandstone Ochre *Trapezites taori*

Wingspan: ♂ 26 mm, ♀ 28 mm. **Similar species:** Orange Ochre, Splendid Ochre. The Sandstone Ochre has the HW underside postmedian spots in a broad broken band and less sharply defined than in the Splendid Ochre. **Behaviour:** adults fly very swiftly, 2–3 m above the ground. During the early morning they settle on stones and vegetation close to ground in open sandy areas to bask, but at other times they may be observed feeding from flowers of *Xanthorrhoea*, *Leptospermum* and *Banksia*, particularly later in the morning or late afternoon. Males establish territories near ridges, cliff edges and the lower slopes of hilltops where they patrol and perch on low bushes in the more open areas. Two generations annually, with adults emerging in Sep–Oct and again in Mar–Apr. **Habitat:** mixed heathland and eucalypt woodland with a heath understorey, preferring dry, rocky, exposed sandstone cliffs and escarpments where the larval food plant grows in cracks, along ledges and crevices, up to 900 m. **Status:** rarely seen, local and restricted to the tablelands of c. QLD. **Larval food plant:** *Lomandra confertifolia*.

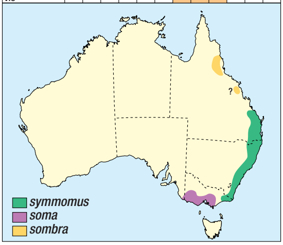
	J	A	S	O	N	D	J	F	M	A	M	J
QLD			🟧	🟧					🟧	🟧		

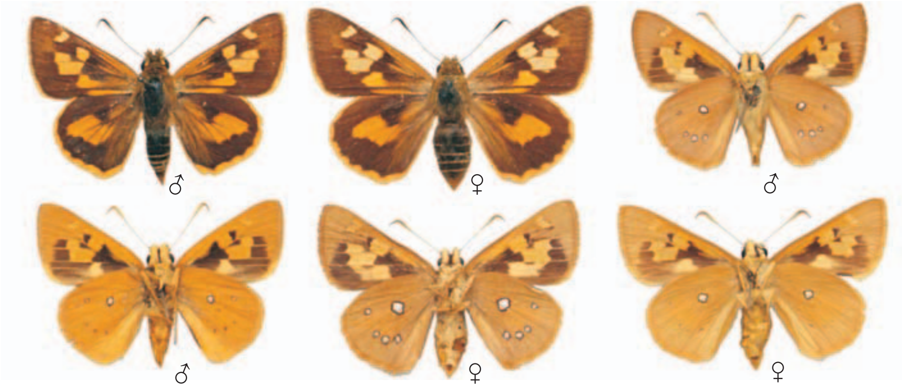


Splendid Ochre *Trapezites symmomus*

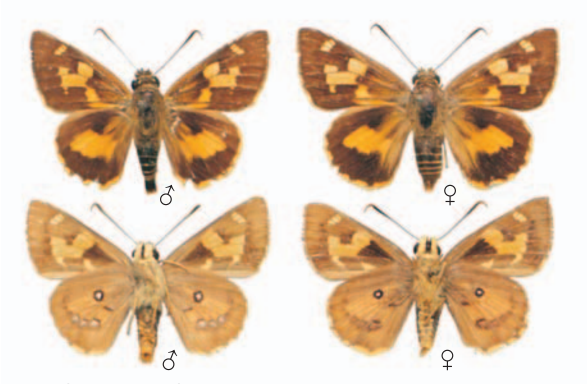
Other name: Symmomus Skipper. **Wingspan:** ♂ 42 mm, ♀ 46 mm. **Similar species:** Sandstone Ochre. The Splendid Ochre is larger, has the upperside colour darker brown, and the HW underside white or bluish-white postmedian band of spots more clearly defined. **Variation:** three subspecies. **Behaviour:** adults fly rapidly during sunshine, usually close to the ground. Males patrol tussocks of the larval food plant during the morning, but in the afternoon they establish territories by perching on foliage of trees 1–7 m above the ground. Probably two generations annually in coastal areas of se. QLD and c. NSW; one generation in montane areas of QLD and NSW, and Melbourne where adults fly from late Jan to Mar. **Habitat:** woodland, eucalypt open-forest, tall open-forest and rainforest edge in coastal and subcoastal areas, from sea level to 1400 m in NSW, above 600 m in ne. QLD, preferring moist gullies, edges of swamps, and banks of creeks and rivers. **Status:** common but local. **Larval food plants:** usually *Lomandra longifolia*; occasionally *L. hystrix, L. filiformis, L. obliqua*, *L. spicata* in NSW.

	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		
VIC							🟧	🟧	🟧			

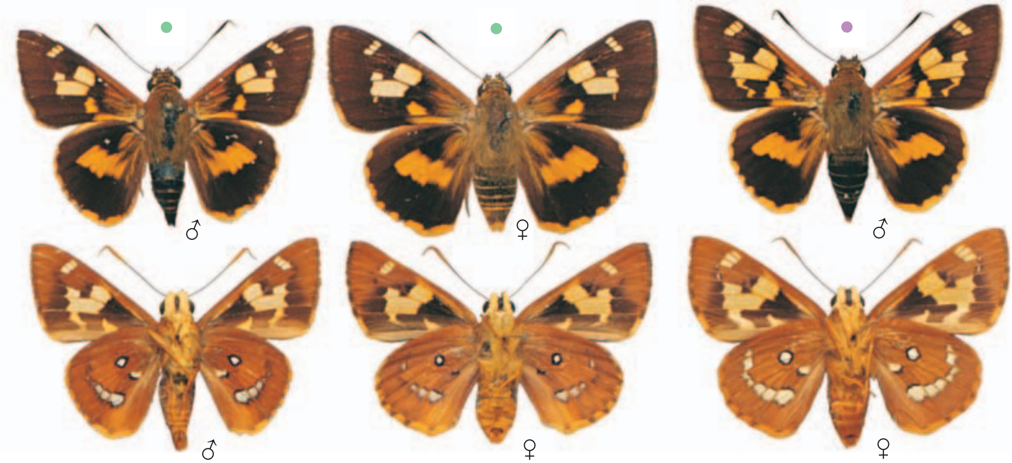




Orange Ochre

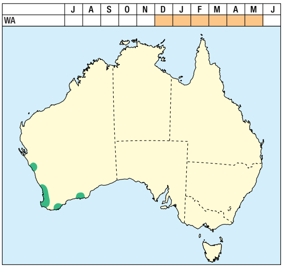


Sandstone Ochre



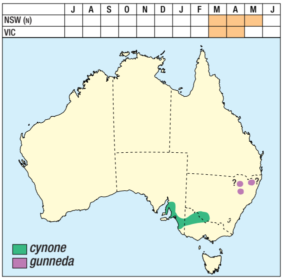
Splendid Ochre

Wedge Grass-skipper *Anisynta sphenosema*



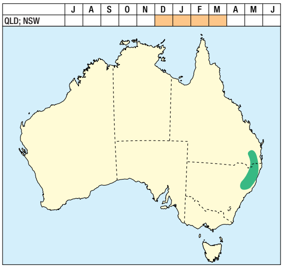
Wingspan: ♂ 25 mm, ♀ 26 mm. **Similar species:** Chequered Grass-skipper. The Wedge Grass-skipper has reddish-brown spots on the HW underside. **Variation:** the FW central spots vary in size and extent. **Behaviour:** adults fly rapidly close to the ground in grassy areas. Females lay their eggs on prostrate plants and dry debris in shady areas. Probably one generation annually, with adults flying from Mar to May near Perth or as early as Dec and Jan further south at Waroona and Bunbury. **Habitat:** eucalypt open-forest, favouring moist areas along creeks with permanent water where native grasses grow; usually encountered in suburban gardens near Perth, preferring densely grassed areas that have been left uncut. **Status:** common but local in suburban areas. **Larval food plants:** *Microlaena stipoides*, **Ehrharta calycina*, **E. longiflora*.

Mottled Grass-skipper *Anisynta cynone*

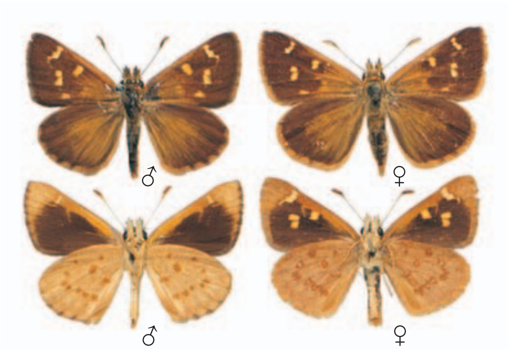


Other name: Cynone Skipper. **Wingspan:** ♂ 23 mm, ♀ 24 mm. **Similar species:** Chequered Grass-skipper. The Mottled Grass-skipper has a series of variable white spots on the HW underside. **Variation:** two subspecies. **Behaviour:** adults fly rapidly, close to the ground, and often perch on dried leaf litter and other debris; they bask in sunlight with wings slightly opened during cooler hours of the morning. One generation annually, with adults flying for only a few weeks after emerging in Mar. **Habitat:** mixed sheoak-eucalypt open-woodland with an understorey of native grasses in the Murray-Sunset National Park, VIC; suburban areas in the wheat belt of nw. VIC, especially vacant land where larval food plant and other grasses are left uncut; coastal sedgeland, grassland on sand dunes and open-woodland in SA; montane eucalypt tall open-forest at Bolivia Hill, NSW. **Status:** common but very local; vulnerable in SA, distribution very fragmented in NSW and VIC. **Larval food plants:** *Austrostipa scabra*, *Cynodon dactylon* in NSW; *Poa* sp. aff. *sieberiana* at Mount Kaputar, NSW; **Oryzopsis miliacea* in nw. VIC; **Brachypodium distachyon* in SA.

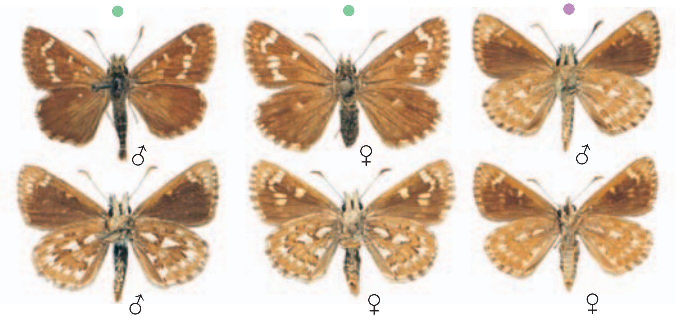
Chequered Grass-skipper *Anisynta tillyardi*



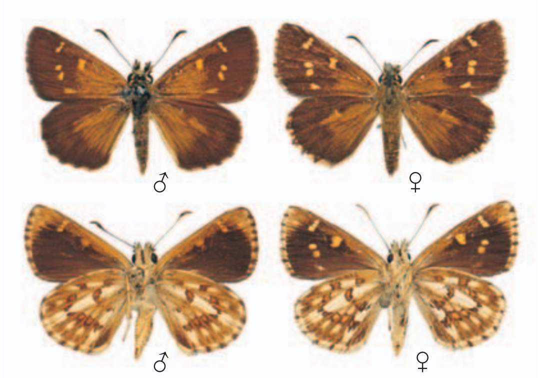
Other name: Tillyard's Skipper. **Wingspan:** ♂ 27 mm, ♀ 28 mm. **Similar species:** Montane Grass-skipper, Wedge Grass-skipper, Mottled Grass-skipper. The Chequered Grass-skipper lacks the HW upperside orange-yellow central spots present in the Montane Grass-skipper. It has two broken bands of yellowish-brown submedian and postmedian spots edged with dark brown on the HW underside compared to the Wedge and Mottled Grass-skippers. **Behaviour:** adults fly rapidly, usually very close to the ground amongst grass tussocks in open sunny patches; they readily feed at flowers of *Verbena* and other plants. Males patrol or settle in sunny clearings where they perch with wings slightly open. Females are usually observed flying near the larval food plant. One generation annually, with adults flying mainly from Jan to Mar. **Habitat:** eucalypt tall open-forest in montane areas of and near the Great Dividing Range, 900–1500 m, preferring moist sheltered situations such as at the base of trees and fallen logs where the larval food plant grows. **Status:** common but local. **Larval food plant:** *Poa labillardieri*.



Wedge Grass-skipper

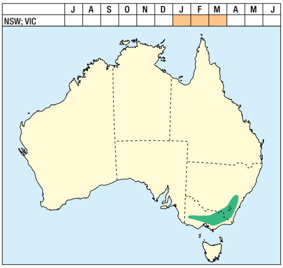


Mottled Grass-skipper



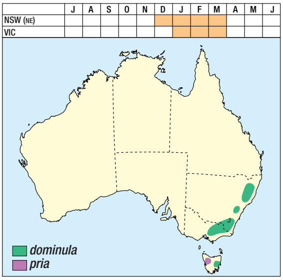
Chequered Grass-skipper

Montane Grass-skipper *Anisynta monticolae*



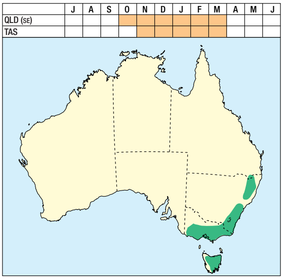
Other name: Mountain Skipper. **Wingspan:** ♂ 23 mm, ♀ 24 mm. **Similar species:** Chequered Grass-skipper. The Montane Grass-skipper is smaller, has orange-yellow central spots on the HW upperside, and the FW underside cell yellow; males have a sex-brand on the FW upperside. **Behaviour:** adults fly swiftly close to the ground amongst grass tussocks in the more open areas, favouring sunlit patches in shady places; they often settle on low foliage in sunny patches and readily feed from flowers, including *Senecio*, *Helichrysum* and *Rubus*. One generation annually, with adults flying for only a few weeks, mainly in Jan–Feb. **Habitat:** eucalypt tall open-forest, wetter open-forests and subalpine woodland in montane areas of and near the Great Dividing Range, between 600 and 1300 m, preferring gullies and sheltered slopes where the larval food plants grow. **Status:** common but local. **Larval food plants:** Poaceae; almost certainly *Poa tenera* in VIC.

Two-brand Grass-skipper *Anisynta dominula*

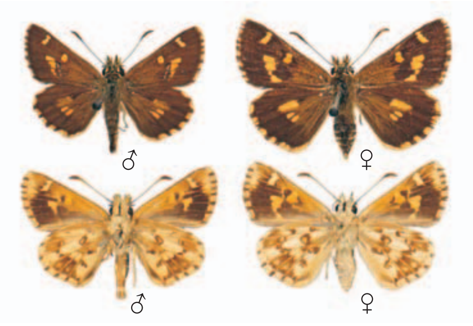


Other name: Dominula Skipper. **Wingspan:** ♂ 28 mm, ♀ 28 mm. **Similar species:** Two-spotted Grass-skipper, Banded Grass-skipper. Two-brand Grass-skipper females are larger, and have conspicuous silvery-white or cream postmedian spots on the HW underside. **Variation:** two subspecies; *A. d. dominula* varies in extent and colour of the HW underside spots. **Behaviour:** adults fly close to the ground in open sunny areas, preferring moist, sheltered, gently sloping grassy gullies and slopes; they frequently feed from flowers of daisies. One generation annually, with adults flying for only a few weeks in summer on the mainland. In TAS, the flight period on the central plateau extends from early Jan to early Mar, but on the eastern coast adults appear from mid Feb to early Apr. **Habitat:** alpine and subalpine grassland and grassy open-woodland, usually between 900 and 1600 m but sometimes down to 600 m on the mainland, from sea level to 1070 m in e. TAS; rarely in swamps and boggy areas. **Status:** common but local. **Larval food plant:** *Poa* in NSW.

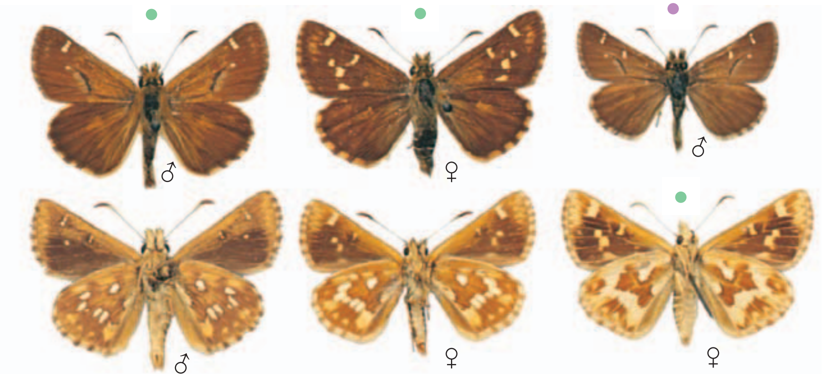
Two-spotted Grass-skipper *Pasma tasmanicus*



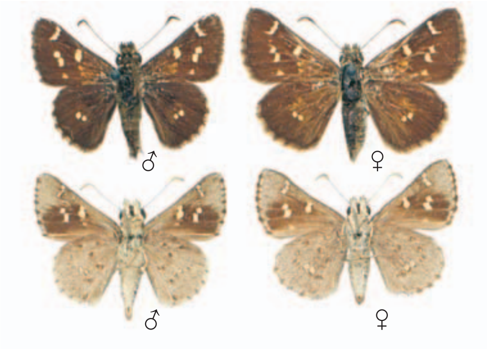
Other name: Tasmanica Skipper. **Wingspan:** ♂ 23 mm, ♀ 24 mm. **Similar species:** Two-brand Grass-skipper, Banded Grass-skipper. Two-spotted Grass-skipper females have two cream spots on the HW upperside. **Behaviour:** adults fly during sunshine, in open grassy areas close to the ground, and frequently feed from flowers. Males typically establish territories by perching on low shrubs, grass tussocks and dead leaves on the ground. Females are usually observed flying solitarily amongst grass tussocks. Probably two generations annually on the mainland, with adults more abundant in spring and autumn, or in mid summer at higher altitudes (above 1000 m). **Habitat:** eucalypt tall open-forest, open-forest and subalpine woodland on the mainland, especially in montane areas of and near the Great Dividing Range, up to 1280 m, but also riparian open-forest at sea level in coastal se. NSW; subalpine areas near sphagnum bogs and button-grass plains in TAS, from sea level up to 900 m. **Status:** common but local. **Larval food plants:** Poaceae, almost certainly *Microlaena stipoides* in ne. NSW and VIC, and *Poa labillardieri* in ACT.



Montane Grass-skipper

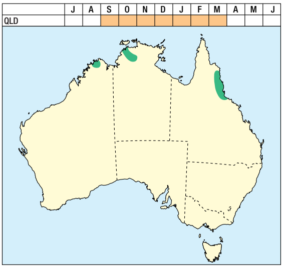


Two-brand Grass-skipper



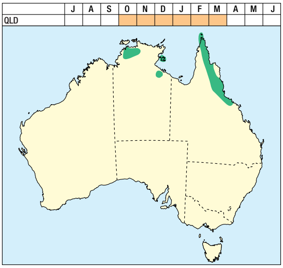
Two-spotted Grass-skipper

Spotted Grass-skipper *Neohesperilla senta*



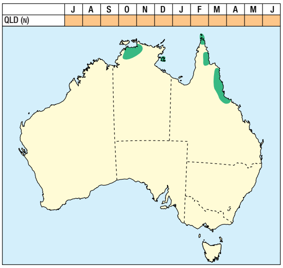
Other name: Senta Skipper. **Wingspan:** ♂ 25 mm, ♀ 27 mm. **Similar species:** Sword-brand Grass-skipper, Narrow-brand Grass-skipper, Yellow Grass-skipper. The Spotted Grass-skipper has numerous cream spots on the HW underside. **Variation:** HW upperside spots vary in number. **Behaviour:** adults fly very rapidly close to ground and commonly feed from flowers, including *Grewia* and *Rostellularia*. Males have been observed to perch on the inflorescence of the larval food plant in open areas to establish territories. One or possibly two generations annually, with adults present for a few months during the late dry to early wet season, depending on the timing of rainfall. **Habitat:** eucalypt open-forest in moist coastal lowlands and on the Atherton Tableland in the Wet Tropics of ne. QLD, preferring the more open grassy areas where the larval food plant grows. **Status:** generally rare and very local, but sometimes common in regrowth areas several months after fire. **Larval food plant:** *Themeda triandra* in ne. QLD.

Sword-brand Grass-skipper *Neohesperilla xiphiphora*

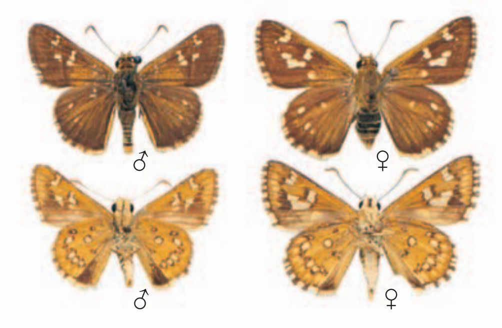


Other name: Xiphiphora Skipper. **Wingspan:** ♂ 23 mm, ♀ 24 mm. **Similar species:** Narrow-brand Grass-skipper. Sword-brand Grass-skipper males have a broader sex-brand; females have a different inclination of the FW upperside subapical band, the inner edge of the FW lower postmedian spot rounded or straight, the underside ground colour yellowier, and the HW underside tornal patch smaller, more rounded and black. **Behaviour:** adults usually fly close to the ground, but during the heat of the day in summer may rest on shrubs or overhanging branches close to water. Males frequently congregate on hilltops where they perch on dead branches on the ground or on the foliage of trees several metres above the ground. One or possibly two generations annually in n. QLD. **Habitat:** savannah woodland, preferring riparian open-forest and dry grassy creek beds. **Status:** generally common but local, especially in areas regenerating after fire early in the wet season. **Larval food plants:** Poaceae, almost certainly *Schizachyrium perplexum* in n. QLD.

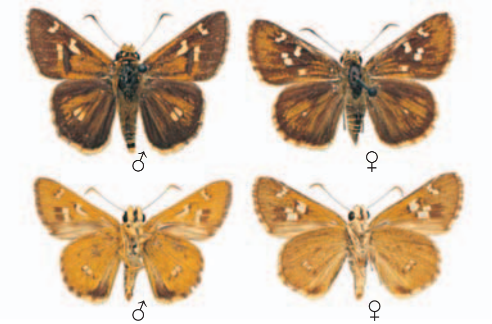
Narrow-brand Grass-skipper *Neohesperilla croceus*



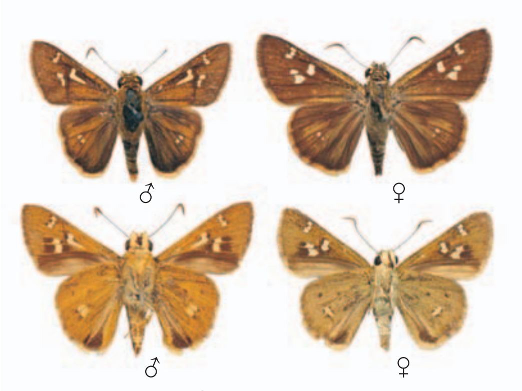
Other name: Crocea Skipper. **Wingspan:** ♂ 27 mm, ♀ 28 mm. **Similar species:** Sword-brand Grass-skipper, Yellow Grass-skipper. Narrow-brand Grass-skipper males have a narrower sex-brand compared to Sword-brand Grass-skipper males; females have a different inclination of the FW upperside subapical band, the inner edge of the FW lower postmedian spot usually wedge-shaped, the underside ground colour greyer, and the HW underside tornal patch larger, triangular-shaped and brown. Males have two central spots on the HW upper and underside compared to Yellow Grass-skipper males. **Behaviour:** males do not hilltop but establish territories by perching on the foliage of shrubs or small trees several metres above the ground near patches of the larval food plant. Females fly close to ground amongst the grass cover. Number of generations completed annually not recorded. **Habitat:** paperbark swampland in coastal areas, and tall open-forest adjacent to rainforest in upland areas in QLD, preferring wetter habitats than the Spotted Grass-skipper and Sword-brand Grass-skipper. **Status:** generally common but local. **Larval food plants:** *Chrysopogon aciculatus* in n. QLD; possibly *Schizachyrium pachyarthron* on Cape York Peninsula, QLD.



Spotted Grass-skipper



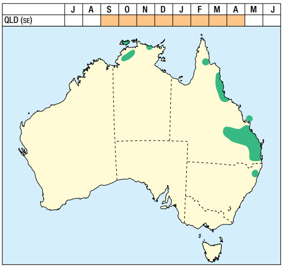
Sword-brand Grass-skipper



Narrow-brand Grass-skipper

Yellow Grass-skipper *Neohesperilla xanthomera*

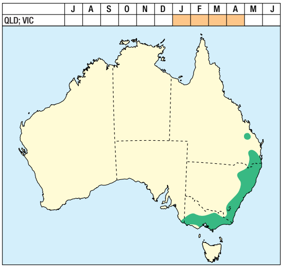
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		



Other name: Xanthomera Skipper. **Wingspan:** ♂ 28 mm, ♀ 30 mm. **Similar species:** Narrow-brand Grass-skipper. Yellow Grass-skipper males have a slightly broader sex-brand, and lack central spots on the HW upper and underside, which are present in Narrow-brand Grass-skipper males. **Behaviour:** males commonly hilltop at the summits of hills and ridges where they establish territories by perching on twigs, rocks and low foliage of trees. Females usually fly close to the ground in grassy areas on the lower slopes but are less frequently seen. Number of generations completed annually not recorded; adults are very seasonal. **Habitat:** dry savannah woodland. **Status:** generally common and local. **Larval food plant:** *Heteropogon* in n. QLD.

Barred Skipper *Dispar compacta*

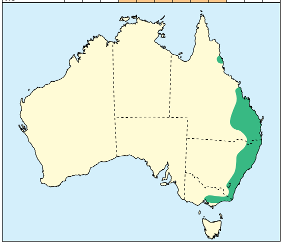
	J	A	S	O	N	D	J	F	M	A	M	J
QLD; VIC							🟧	🟧	🟧	🟧		



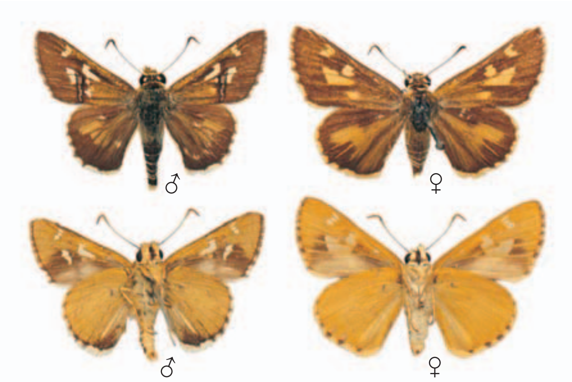
Other name: Dispar Skipper. **Wingspan:** ♂ 23 mm, ♀ 23 mm. **Similar species:** Southern Grass-skipper, Lilac Grass-skipper. Barred Skipper females have the HW underside ground colour orange-brown with a purplish-grey suffusion and usually a whitish-grey postmedian band edged with brown compared to Southern Grass-skipper females. They have a conspicuous orange-yellow patch on the HW upperside, which is absent in Lilac Grass-skipper females. **Variation:** the HW underside postmedian band and spots vary in females. **Behaviour:** adults fly close to the ground in grassy areas and often feed from flowers, particularly those of *Eucalyptus* and *Bursaria*. Males typically patrol shrubs and small trees in a characteristic spiral flight. They also congregate on hilltops where they perch high in the canopy on foliage of the tallest trees. One generation annually, with adults emerging in Jan and Feb. **Habitat:** wide variety of eucalypt open-forests on the coast and tablelands but rarely far inland of the Great Dividing Range, preferring moist shady areas where soft grasses grow; also suburban parks and gardens. **Status:** common, especially in suburban areas, and widespread. **Larval food plants:** usually Poaceae, including *Poa tenera*; occasionally *Lomandra, Gahnia*.

Banded Grass-skipper *Toxidia parvulus*

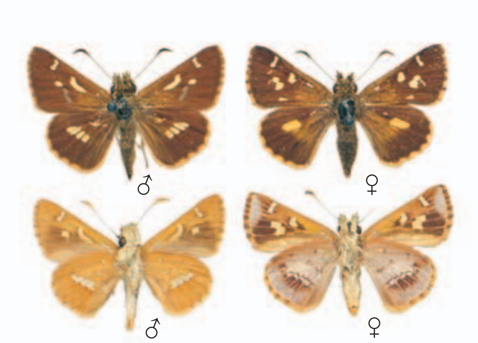
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		
VIC				🟧	🟧	🟧	🟧	🟧	🟧			



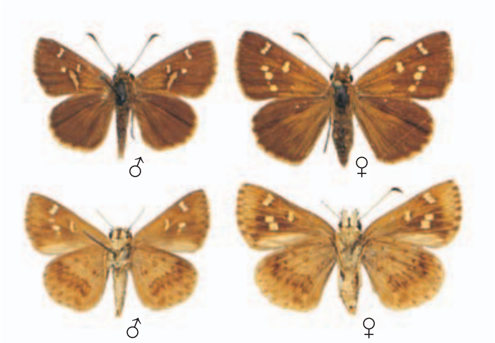
Other name: Parvula Skipper. **Wingspan:** ♂ 23 mm, ♀ 25 mm. **Similar species:** Dusky Grass-skipper, Two-spotted Grass-skipper, Two-brand Grass-skipper. The Banded Grass-skipper has the FW white spots much larger and more numerous than in the Dusky Grass-skipper. Females lack white spots on the HW upperside, which are present in Two-spotted Grass-skipper females. They have the HW underside pattern less conspicuously marked compared to Two-brand Grass-skipper females. **Variation:** the HW underside postmedian band varies in extent and colour. **Behaviour:** males fly very close to the ground, frequenting grassy sunlit areas of the forest understorey in search of females or flowers, their flight somewhat slower and more fluttering than that of the Dingy Grass-skipper. Probably only one or two generations annually in NSW and VIC. **Habitat:** eucalypt open-forest with an open grassy understorey on the coast and tablelands, from sea level to about 900 m. **Status:** common but very local; possibly extinct in outer eastern suburbs of Melbourne. **Larval food plants:** Poaceae.



Yellow Grass-skipper

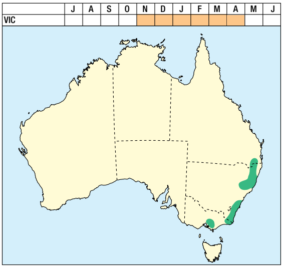


Barred Skipper



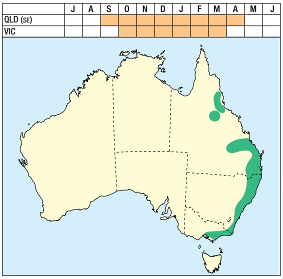
Banded Grass-skipper

Southern Grass-skipper *Toxidia andersoni*



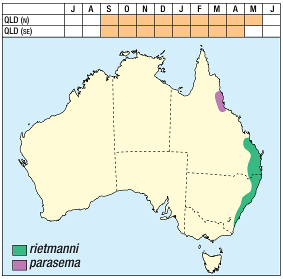
Other name: Anderson's Skipper. **Wingspan:** ♂ 28 mm, ♀ 30 mm. **Similar species:** Barred Skipper, Bright Shield-skipper. Southern Grass-skipper females have the HW underside ground colour variably grey-brown usually without lilac or purple suffusion and with a series of dark irregular rings compared to Barred Skipper females. They have the FW upperside cell spot elongate and bent than in Bright Shield-skipper females. **Behaviour:** adults fly rapidly over the dense ground cover of grass and low vegetation, and readily feed from flowers. Males hilltop and establish territories by perching on the outer foliage of small shrubs 1–4 m above ground. Probably one generation annually; main flight period in VIC from Nov to Feb, with adults generally more abundant in Dec and Jan. **Habitat:** tall open-forest and edges of warm temperate rainforest on the Great Dividing Range and moist coastal ranges, from sea level in se. NSW and VIC to montane areas up to 1100 m in s. QLD and n. NSW. **Status:** uncommon and local. **Larval food plants:** *Poa queenslandica* in se. QLD and ne. NSW; *Tetrarrhena juncea* in VIC.

Lilac Grass-skipper *Toxidia doubledayi*

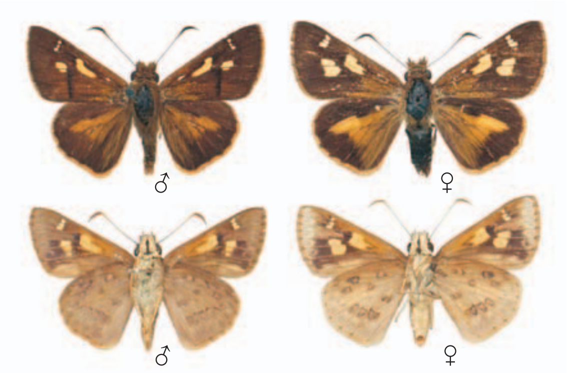


Other name: Doubleday's Skipper. **Wingspan:** ♂ 26 mm, ♀ 26 mm. **Similar species:** White-brand Grass-skipper, Barred Skipper. Lilac Grass-skipper males have a darker, shorter and less waved sex-brand than in White-brand Grass-skipper males. Females have a whitish-lilac band on the HW underside, and lack an orange-yellow patch on the HW upperside, present in Barred Skipper females. **Behaviour:** adults fly swiftly during sunshine, close to the ground in grassy areas. Males establish territories by perching on low shrubs, trees and white flowers in open areas, but do not hilltop. Probably two generations annually in QLD and n. NSW, but only one generation near Melbourne where adults emerge in Nov and Dec. **Habitat:** eucalypt open-forest on the coast and tablelands, preferring damp grassy gullies, especially near coastal lowland areas in NSW; sometimes edges of rainforest. **Status:** common and widespread, especially near coastal lowlands in c. and s. NSW and VIC. **Larval food plants:** Poaceae, including *Oplismenus* in NSW and *Microlaena stipoides* in VIC.

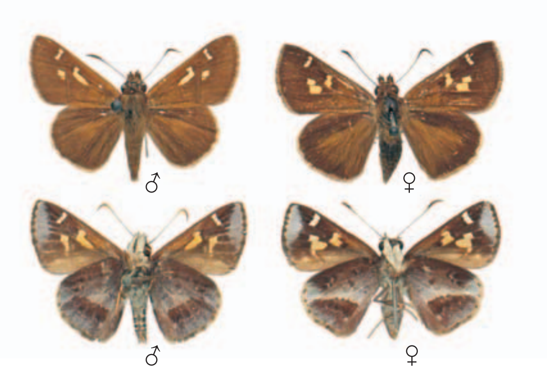
White-brand Grass-skipper *Toxidia rietmanni*



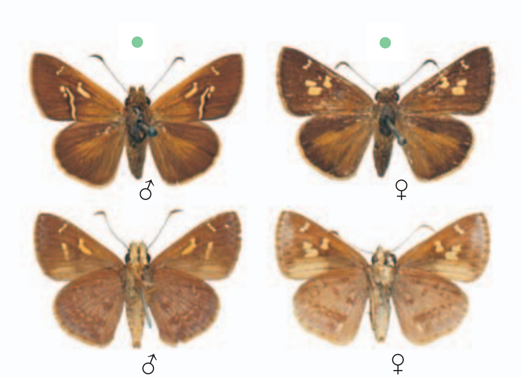
Wingspan: ♂ 24 mm, ♀ 25 mm. **Similar species:** Lilac Grass-skipper, Barred Skipper. White-brand Grass-skipper males have a paler, longer and waved sex-brand compared to Lilac Grass-skipper males. Females lack a whitish-lilac band on the HW underside, and lack an orange-yellow patch on the HW upperside, present in Barred Skipper females. **Variation:** two subspecies. **Behaviour:** adults fly close to patches of grass, and frequently visit flowers such as *Lantana*. Males establish territories by perching on leaves of small shrubs and trees 0.5–4 m above the ground in sunlight. Females settle less frequently, flying rapidly close to the ground. Probably two generations annually near Brisbane, with adults most abundant in late Sep and Oct and again in late Jan and Feb. **Habitat:** usually edges of rainforest; also monsoon forest (vine thicket) and eucalypt tall open-forest; generally in wetter areas than the Lilac Grass-skipper. **Status:** common but local. **Larval food plants:** *Oplismenus* in NSW; almost certainly *Panicum pygmaeum*, *Oplismenus hirtellus*, *Ottochloa gracillima* near Brisbane.



Southern Grass-skipper

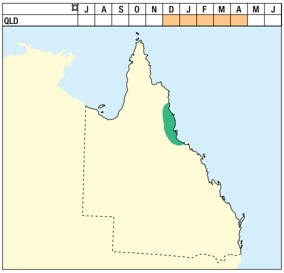


Lilac Grass-skipper



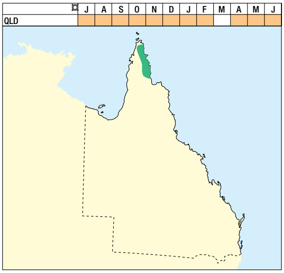
White-brand Grass-skipper

Dark Grass-skipper *Toxidia melania*



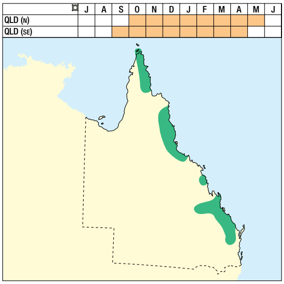
Other name: Black Skipper. **Wingspan:** ♂ 31 mm, ♀ 33 mm. **Similar species:** Spotless Grass-skipper, White-fringed Swift. The Dark Grass-skipper is larger, and has the FW termen more rounded than in the Spotless Grass-skipper; males (when freshly emerged) have a white sex-brand; females have two white spots on the FW. HW termen evenly rounded, and lacks a conspicuous white scale-fringe compared to the White-fringed Swift. **Variation:** the HW underside grey suffusion varies in extent. **Behaviour:** adults fly rapidly over grass and other low growing vegetation within a few metres of the ground. One generation annually, with adults usually most abundant from Jan to Mar. **Habitat:** usually upland rainforest, preferring grassy areas along the edges, including roadsides and forestry tracks; also lowland tropical rainforest where suitable habitat remains. **Status:** common but very local and restricted to the Wet Tropics, QLD. **Larval food plants:** Poaceae, possibly *Entolasia* and *Eriachne pallescens*.

Spotless Grass-skipper *Toxidia inornatus*

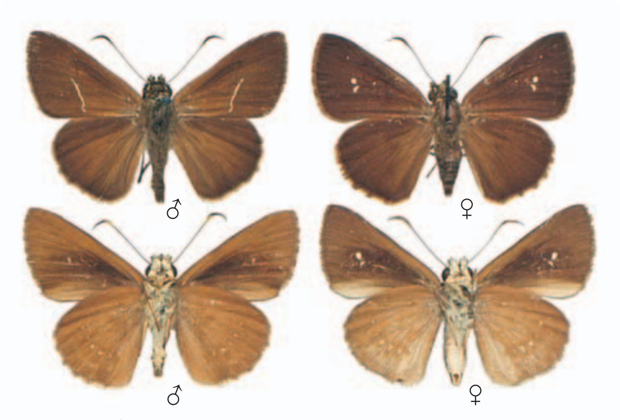


Wingspan: ♂ 26 mm, ♀ 27 mm. **Similar species:** Dark Grass-skipper. The Spotless Grass-skipper is smaller, and has the FW termen straighter; males (when freshly emerged) have a black sex-brand; females lack white spots on the FW. **Behaviour:** adults fly rapidly amongst grasses close to the ground, and often settle on shrubs and grasses near the ground to bask in sunlight. Probably two or more generations annually, with adults most abundant after the wet season. **Habitat:** usually lowland tropical rainforest, where the larval food plant and other grasses grow in the ground layer. **Status:** common but local and restricted to Cape York Peninsula, from the Jardine River basin to the McIlwraith Range ne. of Coen, QLD. **Larval food plants:** Poaceae, possibly *Urochloa reptans*.

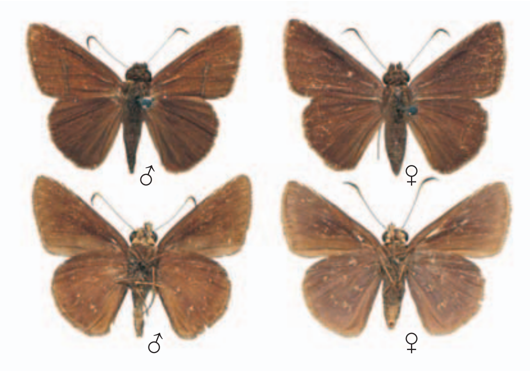
Dusky Grass-skipper *Toxidia thyrrhus*



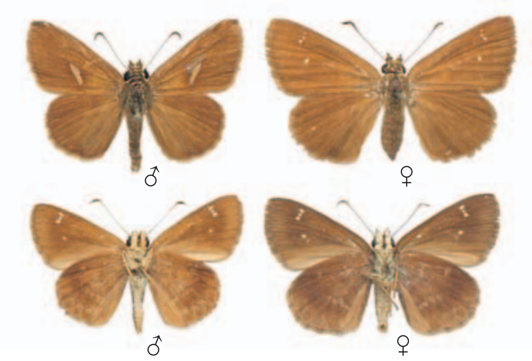
Other name: Thyrrhus Skipper. **Wingspan:** ♂ 26 mm, ♀ 27 mm. **Similar species:** Banded Grass-skipper. The Dusky Grass-skipper has the FW white spots smaller or absent. **Variation:** the FW white spots vary in number. **Behaviour:** adults fly rapidly close to the ground and frequently settle on grasses. Probably only one or two generations annually; adults are very seasonal and generally more abundant during the wet season. **Habitat:** eucalypt open-forest on the coast and tablelands, preferring damp grassy areas beside dry gullies, creeks and rivers; extends as far inland as the Blackdown Tableland, QLD. **Status:** common but very local. **Larval food plants:** Poaceae, possibly *Cenchrus echinatus* in cc. QLD.



Dark Grass-skipper



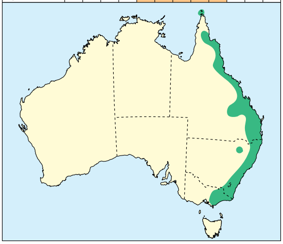
Spotless Grass-skipper



Dusky Grass-skipper

Dingy Grass-skipper *Toxidia peron*

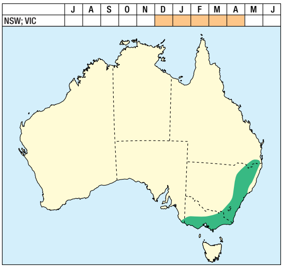
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (E)			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	
VIC					🟧	🟧	🟧	🟧	🟧			



Other name: Large Dingy Skipper. **Wingspan:** ♂ 29 mm, ♀ 30 mm. **Similar species:** Bright Shield-skipper, Two-spotted Sedge-skipper. Dingy Grass-skipper males have a conspicuous, oblique, black sex-brand compared to Bright Shield-skipper males. Females have only two cream postmedian spots on the FW upperside compared to Two-spotted Sedge-skipper females; males have a broader sex-brand. **Behaviour:** males regularly hilltop and perch on low shrubs, grasses and twigs close to the ground. Number of generations completed annually not recorded; adults are present throughout the year in n. QLD but are more seasonal in se. NSW and e. VIC. **Habitat:** eucalypt open-forest, especially on the tablelands and coastal areas east of the Great Dividing Range; does not penetrate far inland west of the Divide, reaching western-most limits at Carnarvon Range, QLD, and Mount Kaputar, NSW. **Status:** common and widespread. **Larval food plants:** usually Poaceae, including **Stenotaphrum secundatum*; also *Gahnia sieberiana, Dianella caerulea*, *Lomandra* in c. QLD.

Bright Shield-skipper *Signeta flammeata*

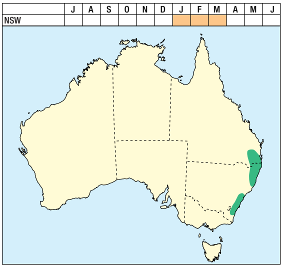
	J	A	S	O	N	D	J	F	M	A	M	J
NSW; VIC						🟧	🟧	🟧	🟧	🟧		



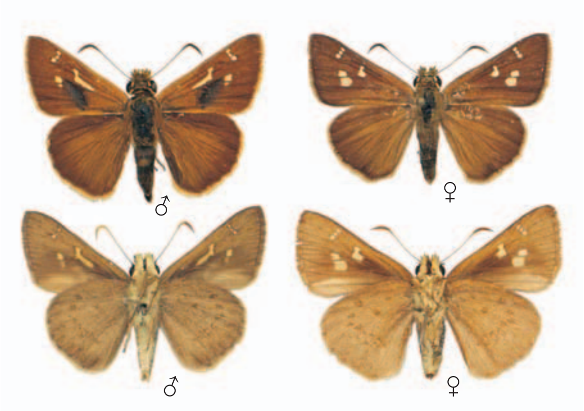
Wingspan: ♂ 30 mm, ♀ 30 mm. **Similar species:** Dingy Grass-skipper, Southern Grass-skipper, Dark Shield-skipper. Bright Shield-skipper males have a large black central patch on the FW upperside, not present in Dingy Grass-skipper males. Females have the FW upperside cell spot more rounded, and the HW underside spots smaller and often less distinct than in Southern Grass-skipper females. Males have a sex-brand and two pale yellow spots on the FW upperside compared to Dark Shield-skipper males; females have an orange central streak on the HW upperside. **Behaviour:** adults fly rapidly close to the ground, and readily feed from flowers, including *Bursaria*, introduced Blackberry and *Buddleia*. Males frequently hilltop and establish territories by perching on the outer leaves of trees 4–9 m above the ground. Females are usually observed flying over grass and leaf litter. One generation annually, with adults emerging in summer. **Habitat:** eucalypt open-forest, tall open-forest and subalpine woodland on and near the Great Dividing Range, up to 1700 m in ACT, preferring cool, moist areas. **Status:** common but local. **Larval food plants:** Poaceae, including *Poa tenera* and *Tetrarrhena juncea* in VIC.

Dark Shield-skipper *Signeta tymbophora*

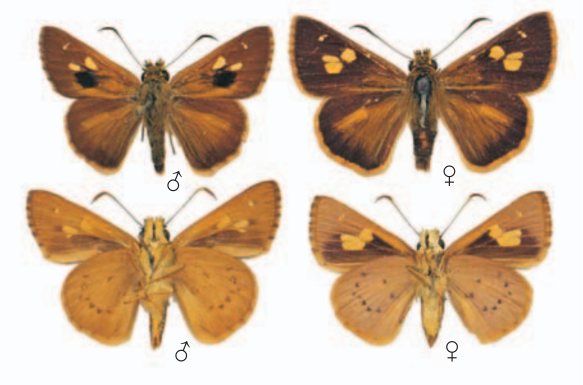
	J	A	S	O	N	D	J	F	M	A	M	J
NSW							🟧	🟧	🟧			



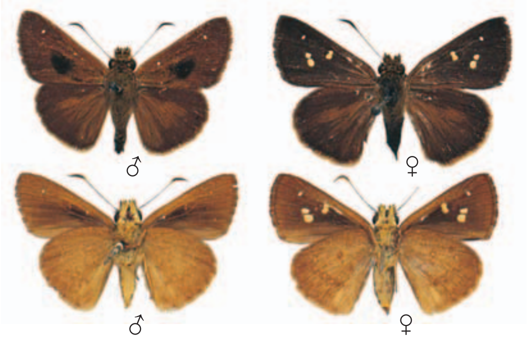
Wingspan: ♂ 27 mm, ♀ 28 mm. **Similar species:** Bright Shield-skipper. Dark Shield-skipper males have the FW upperside darker brown, without both a sex-brand and pale yellow central spots; females have the underside ground colour yellowish-brown, and lack an orange central streak on the HW upperside. **Behaviour:** adults fly along the edges of the forest or in sunlit glades within deep gullies, occasionally stopping to feed at flowers, including *Marsdenia* and *Lantana*; during the afternoon they have been observed settled in sunlit patches at the edge of the forest canopy. One generation annually, with adults emerging mainly in Jan and Feb. **Habitat:** subtropical and warm temperate rainforest in upland areas of the Great Dividing Range in s. QLD and n. NSW, and in lowland areas and eastern slopes of the Divide in c. and s. NSW. **Status:** uncommon and very local. **Larval food plants:** usually *Carex hubbardii* in NSW; also *Gahnia sieberiana* and Poaceae, possibly *Entolasia marginata* in cc. NSW.



Dingy Grass-skipper

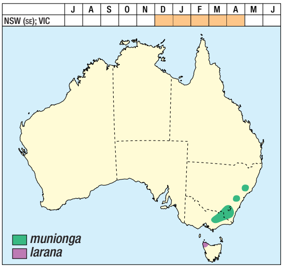


Bright Shield-skipper



Dark Shield-skipper

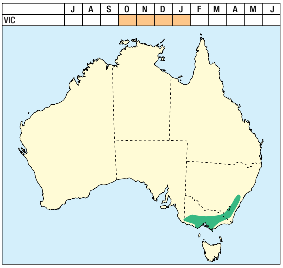
Alpine Sedge-skipper *Oreisplanus munionga*



	J	A	S	O	N	D	J	F	M	A	M	J
NSW (SE); VIC						🟧	🟧	🟧	🟧	🟧		

Other name: Marrawah Skipper. **Wingspan:** ♂ 25 mm, ♀ 30 mm. **Similar species:** Montane Sedge-skipper, Spotted Sedge-skipper. The Alpine Sedge-skipper has the FW orange cell spot narrower and not rounded, the FW underside costa orange, and the HW underside ground colour yellowier with narrower black bars compared to the Montane Sedge-skipper. It has the termen of both wings more rounded, and the FW upperside spots orange compared to the Spotted Sedge-skipper; males lack a sex-brand. **Variation:** two subspecies. **Behaviour:** adults fly close to ground in the breeding areas and feed at flowers of everlastings. One generation annually, with adults emerging mainly in Feb. **Habitat:** alpine and subalpine open-woodland and grassland in NSW, ACT and VIC, from 1060 to 1600 m, preferring soaks, swamps and damp areas where the larval food plants grow; lowland swamps in wet heathland near sea level in TAS; requires periodic disturbance such as fire. **Status:** common but local; vulnerable in TAS. **Larval food plants:** usually *Carex appressa*; also *C. longebrachiata*, *Scirpus polystachyus*.

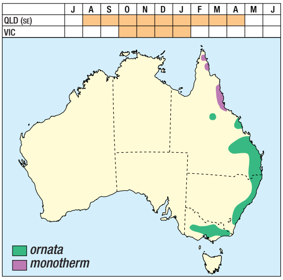
Montane Sedge-skipper *Oreisplanus perornata*



	J	A	S	O	N	D	J	F	M	A	M	J
VIC				🟧	🟧	🟧	🟧					

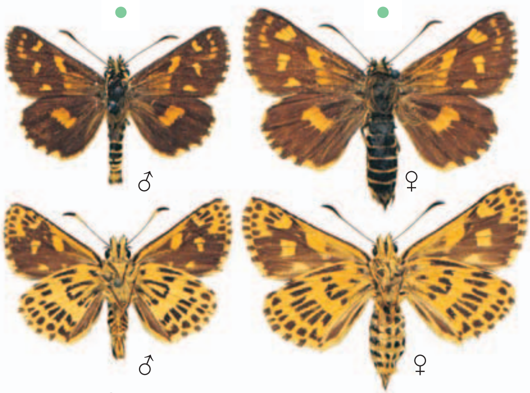
Other name: Mountain Spotted Skipper. **Wingspan:** ♂ 28 mm, ♀ 35 mm. **Similar species:** Alpine Sedge-skipper, Spotted Sedge-skipper. The Montane Sedge-skipper has the FW orange cell spot larger and distinctly rounded, the FW underside costa black, and the HW underside ground colour paler yellow with broader black markings than in the Alpine Sedge-skipper. It has the termen of both wings more rounded, and the FW upperside spots orange compared to the Spotted Sedge-skipper; males lack a sex-brand. **Behaviour:** adults flutter slowly around clumps of the larval food plant and perch at tips of low shrubs. One generation annually, with adults emerging mainly in Nov. **Habitat:** eucalypt open-forest, often with a heath understorey, in coastal lowlands and mountains of and near the Great Dividing Range, up to 1060 m but rarely above 600 m, preferring wet, poorly drained soils or sandstone where the larval food plant grows. **Status:** generally uncommon and local; more common in the Blue Mountains, NSW. **Larval food plant:** *Gahnia sieberiana*.

Spotted Sedge-skipper *Hesperilla ornata*

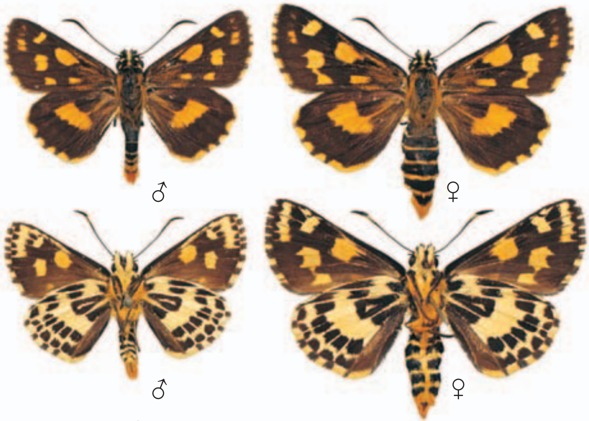


	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		
VIC				🟧	🟧	🟧	🟧					

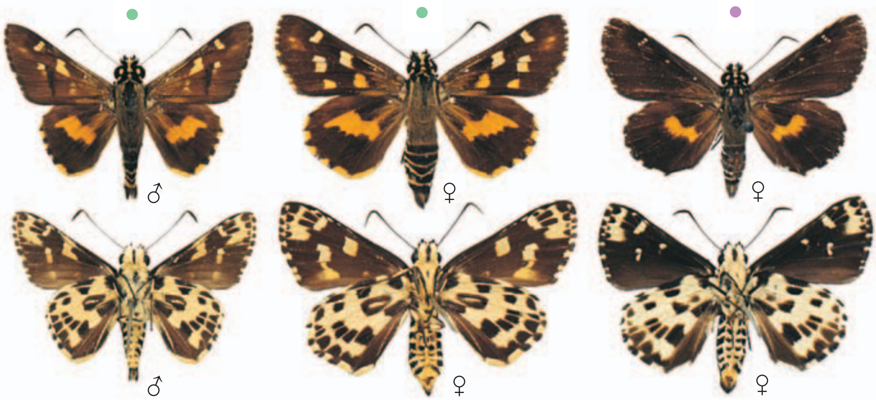
Other name: Spotted Skipper. **Wingspan:** ♂ 30 mm, ♀ 35 mm. **Similar species:** Montane Sedge-skipper, Alpine Sedge-skipper. The Spotted Sedge-skipper has the termen of both wings straighter, the FW upperside spots creamish-white, and the antennal club sharply bent; males have a sex-brand. It has the anterior edge of the HW upperside orange central band strongly produced towards the termen compared to the Montane Sedge-skipper. **Variation:** two subspecies. **Behaviour:** adults fly very rapidly, usually close to ground near the larval food plants, and often feed at flowers. Males sometimes visit hilltops during the afternoon where they patrol and perch on foliage in the mid to upper canopy 6–8 m from ground. At least two generations annually in QLD and NSW; one generation in VIC, with adults emerging mainly in Oct and Nov. **Habitat:** eucalypt open-forest, heathland and edges of rainforest, preferring damp gullies and moist slopes where the larval food plants grow; also riparian open-forest in deep sandstone gorges in inland n. and c. QLD. **Status:** generally uncommon and local. **Larval food plants:** usually *Gahnia*; also *Carex brunnea*, *C. longebrachiata*.



Alpine Sedge-skipper

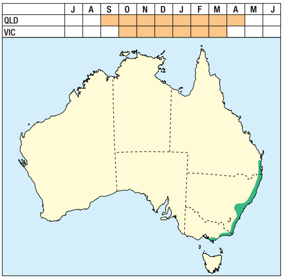


Montane Sedge-skipper



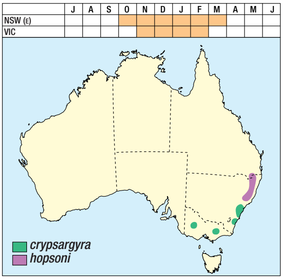
Spotted Sedge-skipper

Painted Sedge-skipper *Hesperilla picta*



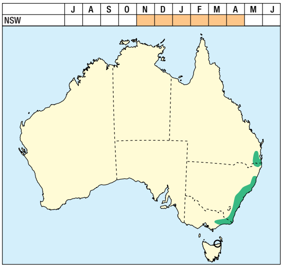
Wingspan: ♂ 32 mm, ♀ 36 mm. **Similar species:** none. The Painted Sedge-skipper has the HW underside ground colour reddish-brown, with a broad cream central band. **Behaviour:** adults fly very rapidly close to the breeding areas; they may perch on leaves in sunlight or feed at flowers of *Pimelea* and *Lantana*. Possibly two generations annually, with adults more abundant in spring and autumn in s. NSW and e. VIC. **Habitat:** open-forest and tall open-forest, mainly in coastal lowlands, preferring damp, sheltered or shaded areas such as gullies and swamps where dense patches of the larval food plant grow; extends from Cooroy, QLD, to Lillypilly Gully on Wilsons Promontory, VIC, but also in the Blue Mountains, NSW. **Status:** generally uncommon and local. **Larval food plant:** *Gahnia clarkei*.

Silver Sedge-skipper *Hesperilla crypsargyra*

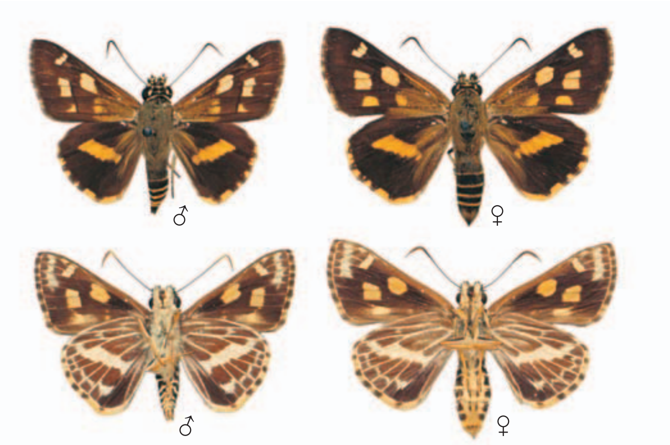


Other name: Hopson's Skipper. **Wingspan:** ♂ 25 mm, ♀ 28 mm. **Similar species:** none. The Silver Sedge-skipper has a broken central band of three large silvery-white spots on the HW underside. **Variation:** two subspecies. **Behaviour:** adults fly close to the ground, usually over rocks within the breeding areas, briefly pausing to feed from flowers. Possibly two generations annually in the Blue Mountains, NSW; one generation in w. VIC, with adults emerging from late Nov to Jan. **Habitat:** wet montane open-forest on the Great Dividing Range, up to 1500 m in n. NSW; eucalypt open-forest with a heath understorey in s. NSW and VIC, between 60 and 1100 m, typically on exposed rocky outcrops such as sandstone or granite where the larval food plant grows. **Status:** uncommon and very local; restricted to two disjunct areas in VIC, Gippsland and the Grampians. **Larval food plants:** *Gahnia sieberiana* in n. and c. NSW; *G. microstachya* in s. NSW and VIC; occasionally *G. grandis* in NSW.

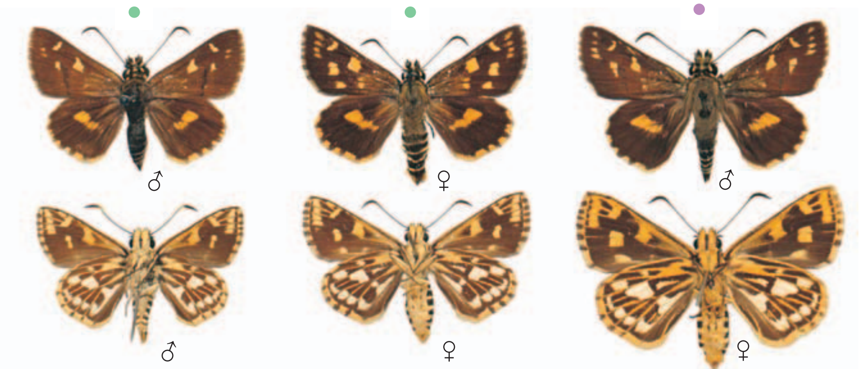
Chequered Sedge-skipper *Hesperilla mastersi*



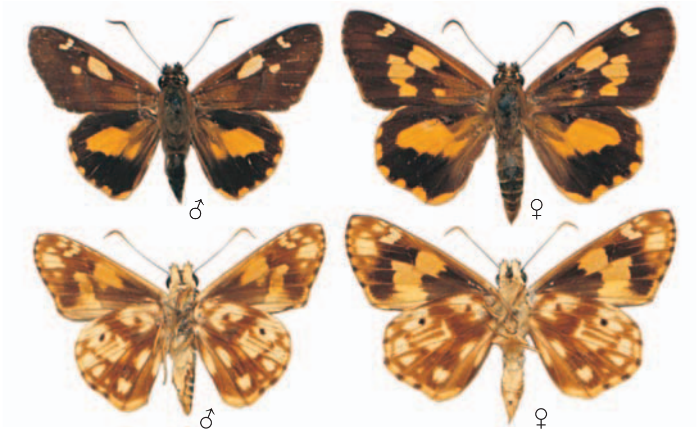
Other name: Master's Skipper. **Wingspan:** ♂ 36 mm, ♀ 39 mm. **Similar species:** Flame Sedge-skipper. Chequered Sedge-skipper females have the underside pattern brown chequered with cream markings. **Behaviour:** males strongly hilltop, but also patrol and settle on leaves of the larval food plant, possibly searching for freshly emerged females. Possibly one generation annually in NSW, with adults emerging over an extended period. **Habitat:** usually subtropical and warm temperate rainforest, from sea level to the moist coastal ranges above 900 m, where the usual larval food plant grows in the dense understorey; also eucalypt tall open-forest with rainforest elements in the understorey; occasionally edges of swamps in coastal heathland in NSW. **Status:** generally rare and very local; extinct in TAS. **Larval food plants:** usually *Gahnia melanocarpa*; occasionally *Gahnia* sp. aff. *radula* in NSW and TAS.



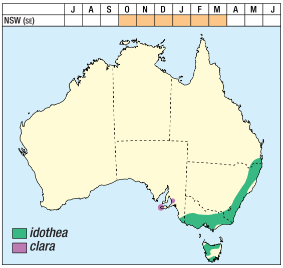
Painted Sedge-skipper



Silver Sedge-skipper

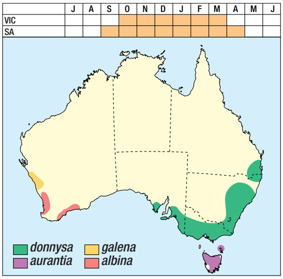


Chequered Sedge-skipper



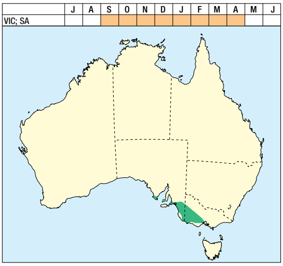
Flame Sedge-skipper *Hesperilla idothea*

Wingspan: ♂ 36 mm, ♀ 39 mm. **Similar species:** Chequered Sedge-skipper. Flame Sedge-skipper females have the underside ground colour uniform orange-brown. **Variation:** two subspecies. **Behaviour:** adults fly rapidly. Males regularly hilltop and establish territories by patrolling small areas or perching on rocks and leaves of shrubs or trees 1–7 m above the ground. Females more often observed near the larval food plant. Possibly one generation annually, with adults emerging over an extended period but mostly from Nov to Jan. **Habitat:** eucalypt open-forest, from sea level to montane areas of the moist coastal ranges and Great Dividing Range on the mainland, preferring sheltered gullies and wetter slopes where the larval food plants grow. **Status:** common but local; vulnerable near Adelaide. **Larval food plants:** usually *Gahnia sieberiana*, *G. radula*; also *G. aspera, G. clarkei, G. grandis, G. melanocarpa, G. subaequiglumis, G. trifida*.



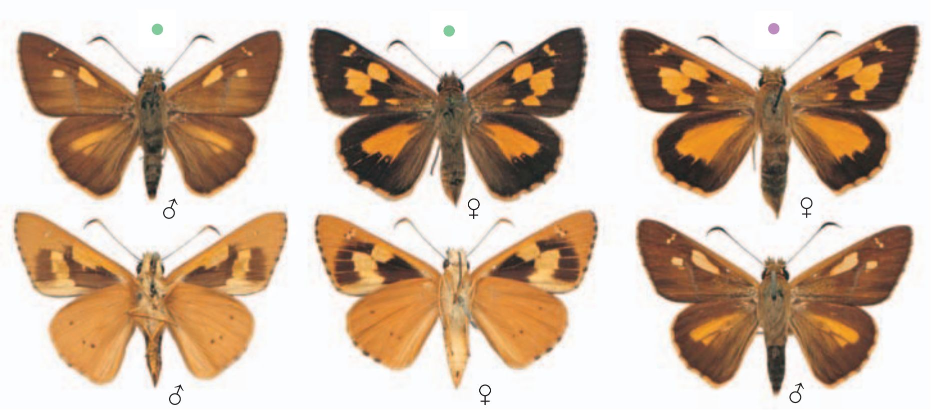
Varied Sedge-skipper *Hesperilla donnysa*

Other name: Donnysa Skipper. **Wingspan:** ♂ 31 mm, ♀ 36 mm. **Similar species:** Golden-haired Sedge-skipper, Yellow Sedge-skipper. The Varied Sedge-Skipper has the HW underside spots smaller, browner and more uniform in size, with five of the spots forming a straight line, compared to the eastern subspecies of the Golden-haired Sedge-skipper (*H. c. cyclospila*), and usually has the underside ground colour grey-brown compared to the western subspecies (*H. c. chrysotricha*); males have the sex-brand less distinct. **Variation:** four subspecies. **Behaviour:** adults fly rapidly close to ground, pausing briefly to settle or to feed from flowers. Males may establish territories at or close to patches of the larval food plants. Two generations annually at Brisbane and Sydney; one generation further south, with adults emerging in Sep–Oct (SA, WA) or Nov–Dec (ACT, VIC, TAS) followed by partial second generation or delayed emergence in Mar–Apr. **Habitat:** wide variety of habitats, from coastal swamps and heathlands through montane open-forests and subalpine woodlands, up to 1500 m, to drier eucalypt open-forests and woodlands inland of the Great Dividing Range, preferring more open sunny areas where clumps of the larval food plants grow. **Status:** common but local. **Larval food plant:** *Gahnia*.

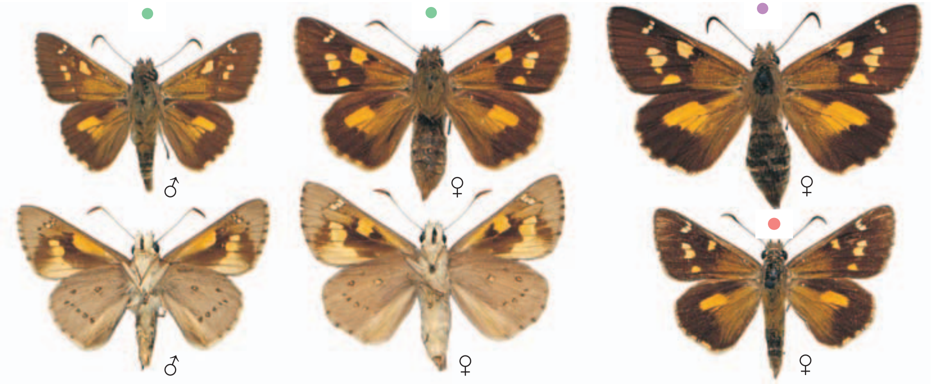


Yellow Sedge-skipper *Hesperilla flavescens*

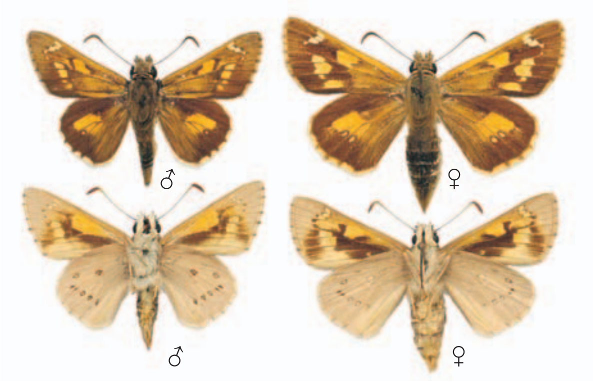
Other names: Yellowish Skipper, Altona Skipper, Flavescens Skipper. **Wingspan:** ♂ 32 mm, ♀ 37 mm. **Similar species:** Varied Sedge-skipper, Golden-haired Sedge-skipper. The Yellow Sedge-skipper usually has the upperside colour extensively suffused with yellow, and the underside ground colour paler compared to the Varied Sedge-skipper. **Variation:** extent of upperside yellow suffusion and spots, underside ground colour, and form of the HW underside postmedian spots very considerably. **Behaviour:** adults fly rapidly close to the ground amongst tussocks of the larval food plant, and readily feed from flowers when available. Males perch on the upper leaves or in patches of bare ground, possibly to establish territories. Probably one generation annually, with adults emerging mainly in late Sep–Oct, followed by smaller numbers during summer and autumn. **Habitat:** sedgeland in slightly saline swamps and along edges of lakes, where the usual larval food plant grows, especially young plants or those regenerating after disturbance. **Status:** uncommon and very local; vulnerable near Melbourne. **Larval food plant:** usually *Gahnia filum*; occasionally *G. deusta* in SA.



Flame Sedge-skipper

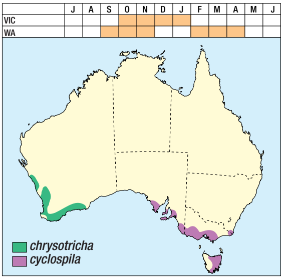


Varied Sedge-skipper



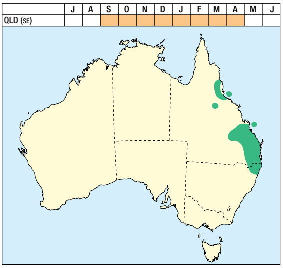
Yellow Sedge-skipper

Golden-haired Sedge-skipper *Hesperilla chrysotricha*



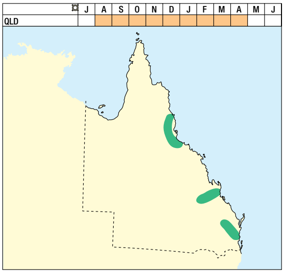
Other name: Chrysotricha Skipper. **Wingspan:** ♂ 33 mm, ♀ 36 mm. **Similar species:** Varied Sedge-skipper, Yellow Sedge-skipper. The eastern subspecies of the Golden-haired Sedge-skipper (*H. c. cyclospila*) has large elongate white spots on the HW underside; males have a broader and more distinct sex-brand. The western subspecies (*H. c. chrysotricha*) has the underside ground colour reddish-brown compared to the Varied Sedge-skipper. **Variation:** two subspecies. **Behaviour:** adults fly rapidly close to the ground around clumps of the larval food plant. One generation annually in se. Australia, with adults emerging mainly in spring; one generation annually in WA, with adults flying from Sep to Nov, followed by a delayed emergence or possible partial second generation between Feb and Apr. **Habitat:** usually open-sedgeland in estuarine brackish swamps and watercourses, where the usual larval food plants grow; also eucalypt and banksia open-woodland in subcoastal areas. **Status:** common but very local; lower risk in SA. **Larval food plants:** usually *Gahnia trifida* and *G. filum* in coastal estuarine swamps; also *G. sieberiana*, *G. radula*, *G. microstachya* in subcoastal areas in VIC, TAS and SA, and *G. decomposita, G. deusta* in subcoastal areas in WA.

Two-spotted Sedge-skipper *Hesperilla malindeva*

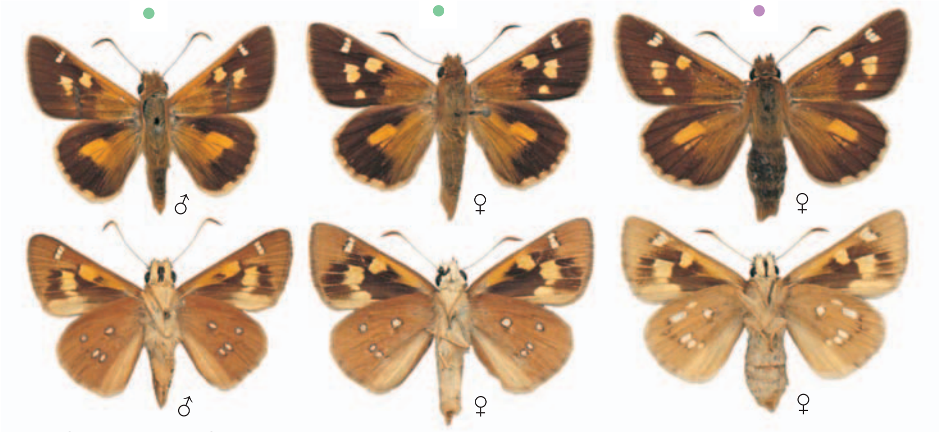


Other name: Malindeva Skipper. **Wingspan:** ♂ 30 mm, ♀ 34 mm. **Similar species:** Swift Sedge-skipper, Dingy Grass-skipper. The Two-spotted Sedge-skipper (when freshly emerged) has the underside ground colour greyer than in the Swift Sedge-skipper; males have the sex-brand narrower posteriorly, and a spot in the FW cell. It usually has two dark brown central spots on the HW underside compared to the Dingy Grass-skipper; females have three pale yellow postmedian spots on the FW upperside. **Variation:** the HW underside dark brown spots are sometimes absent. **Behaviour:** males regularly hilltop and perch on dead twigs, fallen branches and foliage of bushes, usually above 1 m from the ground, in sheltered spots on the edges of hills. Females often observed feeding from flowers such as *Lantana*. Probably two or more generations completed annually. **Habitat:** woodland and monsoon forest (vine thicket) on sandstone and granite, especially in drier subcoastal and inland areas where the larval food plant grows in rocky gullies and slopes. **Status:** common but local. **Larval food plant:** *Gahnia aspera*.

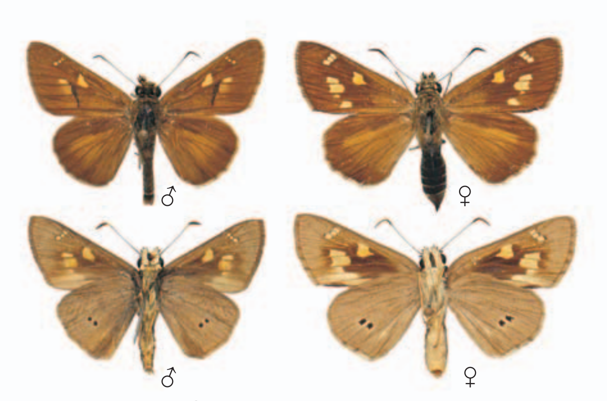
Swift Sedge-skipper *Hesperilla sarnia*



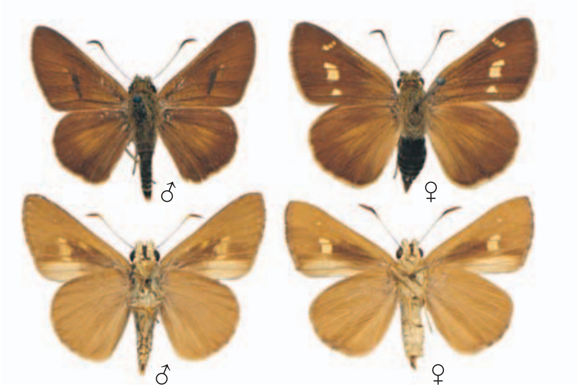
Wingspan: ♂ 29 mm, ♀ 30 mm. **Similar species:** Two-spotted Sedge-skipper. The Swift Sedge-skipper (when freshly emerged) has the underside ground colour richer brown; males have the sex-brand broader posteriorly. **Variation:** the FW upperside pale yellow spots vary in number in females. **Behaviour:** males strongly hilltop and establish territories by perching in small sunny clearings on dead twigs and foliage of bushes, usually 1 m above the ground or sometimes higher (2–5 m) in the Wet Tropics, QLD. Females usually observed near the larval food plant but rarely seen. Number of generations completed annually not recorded. **Habitat:** monsoon forest (vine thicket) on rocky outcrops and hilltops, between 550 and 1200 m in n. QLD, preferring sheltered situations amongst rocks and boulders where the larval food plant grows. **Status:** generally uncommon and local. **Larval food plants:** *Scleria levis* in ne. QLD; *Scleria* sp. in c. QLD.



Golden-haired Sedge-skipper



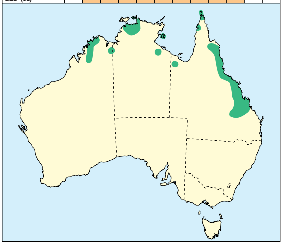
Two-spotted Sedge-skipper



Swift Sedge-skipper

Riverine Sedge-skipper *Hesperilla sexguttata*

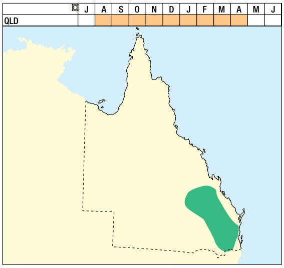
	J	A	S	O	N	D	J	F	M	A	M	J
NT		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
QLD (SE)		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		



Other name: Six-spot Skipper. **Wingspan:** ♂ 25 mm, ♀ 28 mm. **Similar species:** Grey Sedge-skipper, Wide-brand Sedge-skipper. Riverine Sedge-skipper males have more postmedian spots on the FW upperside, the sex-brand a different shape, and the HW termen less rounded than in Grey Sedge-skipper males. Females (when freshly emerged) have a yellowish suffusion on the underside, and the FW upperside spots pale yellow, rather than cream. **Behaviour:** adults fly in sunny clearings, rest on twigs and low bushes, and may feed from flowers, including *Caelospermum* and *Helichrysum*. Males usually do not hilltop, unlike related species. Number of generations completed annually not recorded. **Habitat:** eucalypt woodland and open-forest, preferring flood plains, margins of swamps and lagoons, and along sandy creek beds and banks of rivers where the larval food plants grow; occasionally brigalow woodland in c. QLD. Habitats often temporarily flooded during the wet season. **Status:** common but local. **Larval food plants:** usually *Cyperus javanicus*; also *C. decompositus* n. QLD and *C. microcephalus* in WA.

Grey Sedge-skipper *Hesperilla furva*

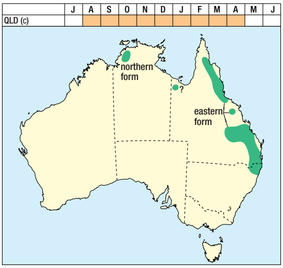
¤	J	A	S	O	N	D	J	F	M	A	M	J
QLD		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		



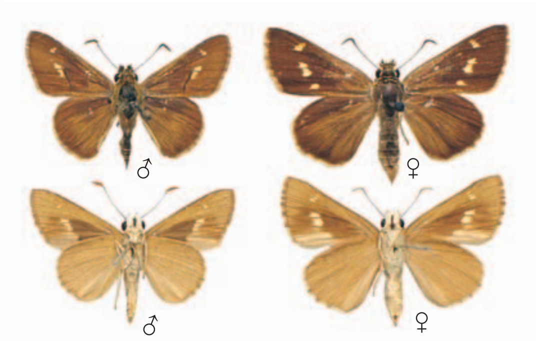
Wingspan: ♂ 26 mm, ♀ 28 mm. **Similar species:** Riverine Sedge-skipper, Wide-brand Sedge-skipper. Grey Sedge-skipper males have fewer postmedian spots on the FW upperside, the sex-brand straighter, and the HW termen more rounded than in Riverine Sedge-skipper males. Females tend to have the underside ground colour darker grey-brown, and the outward edge of the FW postmedian spots forming a straight line compared to Wide-brand Sedge-skipper females. **Behaviour:** adults fly rapidly close to the ground and feed from flowers, including *Boronia*, *Leptospermum* and *Helichrysum*. Males commonly hilltop after midday and establish territories by perching on low bushes and rocks. Females more often observed flying amongst clumps of the larval food plants. Number of generations completed annually not recorded. **Habitat:** eucalypt open-forest and brigalow woodland in drier areas of the central tablelands in c. and se. QLD, preferring elevated sandstone slopes and ridges where the larval food plants grow. **Status:** common but local. **Larval food plants:** usually *Scleria sphacelata*; occasionally *S. mackaviensis*.

Wide-brand Sedge-skipper *Hesperilla crypsigramma*

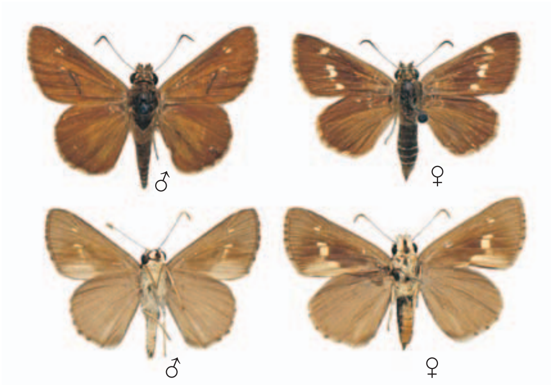
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (c)		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		



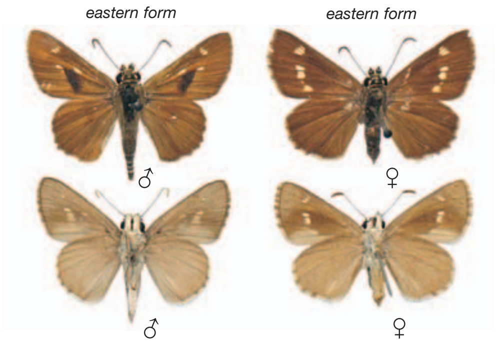
Other name: Small Dingy Skipper. **Wingspan:** ♂ 24 mm, ♀ 25 mm. **Similar species:** Riverine Sedge-skipper, Grey Sedge-skipper. Wide-brand Sedge-skipper males have the sex-brand broader. Females have the underside ground colour uniform grey-brown, and the FW upperside spots cream compared to Riverine Sedge-skipper females. Underside ground colour paler grey-brown compared to Grey Sedge-skipper females. **Variation:** two geographical forms. **Behaviour:** adults feed from flowers, particularly *Caelospermum* and *Senecio*, growing in gullies and lower slopes of hills during the early morning. Males, after mid morning, congregate on hilltops and establish territories by perching on rocks and bushes close to ground. Number of generations completed annually not recorded. **Habitat:** wide variety of habitats, including montane eucalypt open-forest, edges of rainforest and monsoon forest (vine thicket), preferring gullies and rocky slopes where the larval food plants grow on conglomerate and granitic soils. **Status:** common but local. **Larval food plants:** *Scleria sphacelata* in NT, QLD; *S. mackaviensis* in c. QLD.



Riverine Sedge-skipper

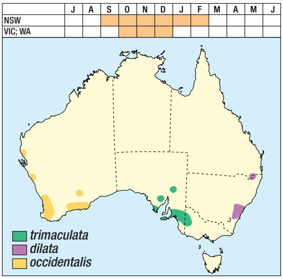


Grey Sedge-skipper



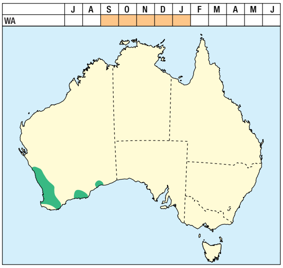
Wide-brand Sedge-skipper

Large Brown Skipper *Motasingha trimaculata*



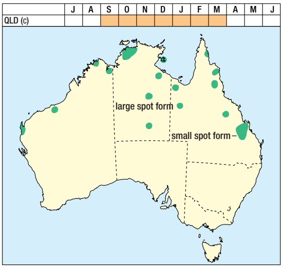
Other names: Tepper's Skipper, Western Three-spotted Skipper. **Wingspan:** ♂ 33 mm, ♀ 36 mm. **Similar species:** Western Brown Skipper. The Large Brown Skipper has the underside ground colour yellowish-brown, and the HW underside anterior postmedian spot larger than the other postmedian spots; males have the sex-brand narrower; females often have the FW upperside spots larger and pale yellow. **Variation:** three subspecies. **Behaviour:** males have a strong, powerful flight; they frequently hilltop and establish territories by perching on twigs, leaves or bare ground on the summits of hills or sand ridges. Females usually observed near the larval food plants. One generation annually, with adults emerging in spring. **Habitat:** eucalypt open-forest and woodland with a heath understorey on sandstone in NSW; heathland and mallee-heath on sandy soils in w. and nw. VIC; heathland, eucalypt and banksia woodland with a heath understorey on sand in WA. **Status:** generally uncommon and local. **Larval food plants:** *Lepidosperma viscidum* in NSW, VIC and SA; *L. concavum* in cc. NSW; *L. carphoides* in nw. VIC and SA; *L. angustatum*, *Phlebocarya ciliata* in WA.

Western Brown Skipper *Motasingha dirphia*

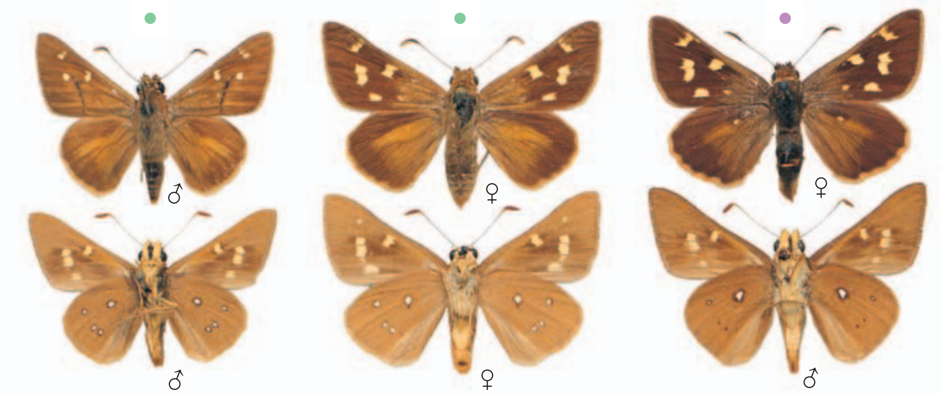


Other name: Dirphia Skipper. **Wingspan:** ♂ 35 mm, ♀ 38 mm. **Similar species:** Large Brown Skipper. The Western Brown Skipper has the underside ground colour pink or slightly reddish, and the HW underside anterior postmedian spot about the same size as the other postmedian spots; males have the sex-brand broader; females often have the FW upperside spots smaller and cream-white. **Behaviour:** males have been collected on hilltops. Probably one generation annually, with adults emerging mainly in Oct and Nov; flight period last for only a few weeks at any given location. **Habitat:** heathland, and eucalypt and banksia woodland with a heath understorey on sand. Occurs in coastal and subcoastal areas of sw. WA, extending sporadically from Cocklebiddy to Esperance, and from Albany nw. to Geraldton. **Status:** uncommon but widespread. **Larval food plant:** not recorded.

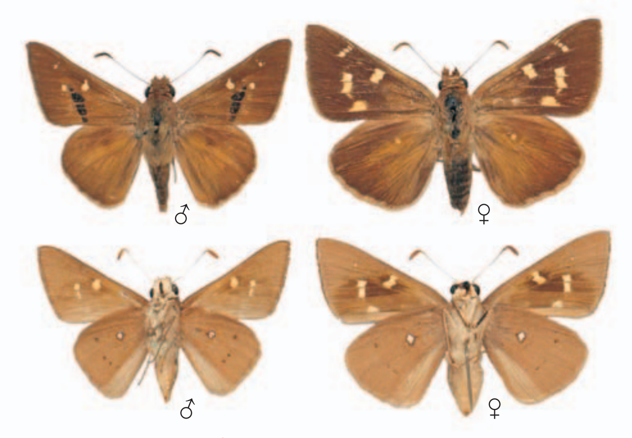
Spinifex Sand-skipper *Proeidosa polysema*



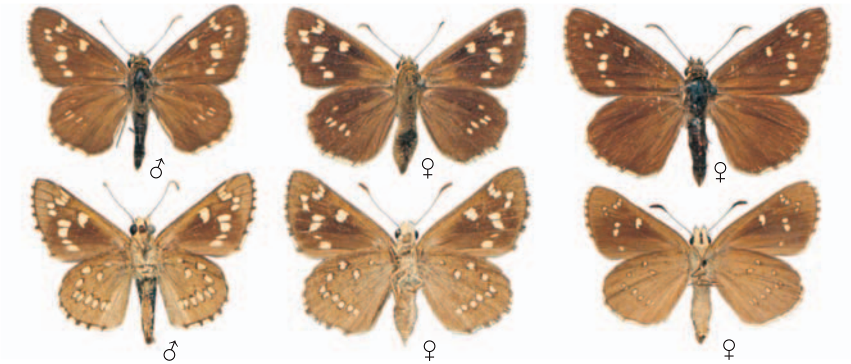
Other name: Polysema Skipper. **Wingspan:** ♂ 29 mm, ♀ 34 mm. **Similar species:** none. The Spinifex Sand-skipper has the upperside colour dark brown with white spots on the FW, and numerous white spots on the underside. **Variation:** two geographical forms. **Behaviour:** males strongly hilltop and establish territories by perching on dead twigs on the ground in more open areas at the summits of hills and steep ridges; they also feed from flowers during the morning and late afternoon. Females fly close to the ground between clumps of the larval food plant and rest on stones and leaf litter. Number of generations completed annually not recorded; adults are usually more abundant in the late dry season and again in the early wet season in QLD. **Habitat:** open spinifex on sand dunes and eucalypt woodland on dry rocky sandstone, preferring shallow gullies and slopes of hills where the larval food plants grow. **Status:** generally uncommon and very local, but may be common in areas where the food plants are regenerating following fire. **Larval food plants:** *Triodia pungens* in cc. WA; *T. microstachya* in n. NT; *Triodia* sp. aff. *pungens* in n. QLD; *T. mitchellii* in c. QLD.



Large Brown Skipper

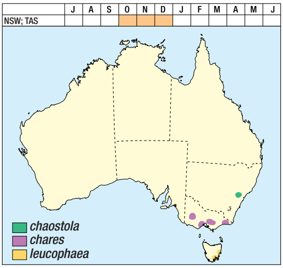


Western Brown Skipper


large spot form *large spot form* *small spot form*

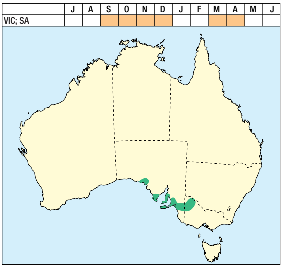
Spinifex Sand-skipper

Heath Sand-skipper *Antipodia chaostola*



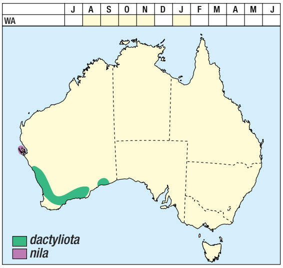
Other name: Chaostola Skipper. **Wingspan:** ♂ 32 mm, ♀ 35 mm. **Similar species:** Montane Iris-skipper. The Heath Sand-skipper has two white subterminal spots on the FW, a dull orange central patch on the HW upperside, and the underside ground colour grey richly suffused with purple; males have a sex-brand. **Variation:** three subspecies. **Behaviour:** adults fly close to the ground near the larval food plant and feed from flowers of *Leptospermum* and *Pimelea*. Males fly during warm, sunny, still conditions in sunlit areas and frequently perch on the upper leaves of the food plant to bask or establish territories. Females are less active and usually fly closer to the ground. One generation biannually, with adults emerging in spring. **Habitat:** eucalypt open-forest and low open-woodland with a sedge-heathland understorey on poorly drained soils, often on a northern or relatively exposed aspect, mainly in coastal lowlands, but between 400 and 1000 m on sandstone escarpments in the Blue Mountains, NSW. **Status:** generally rare and very local, but may be common for a few years after fire. **Larval food plants:** usually *Gahnia filifolia* in NSW, and *G. radula* in VIC and TAS; occasionally *G. sieberiana*, *G. microstachya*, *G. grandis*.

Diamond Sand-skipper *Antipodia atralba*

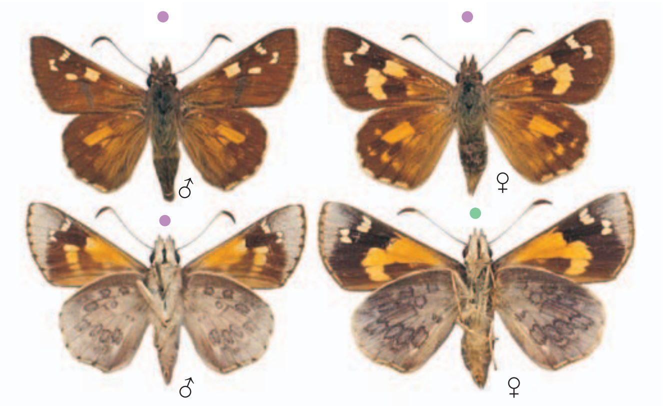


Other name: Black and White Skipper. **Wingspan:** ♂ 31 mm, ♀ 35 mm. **Similar species:** Western Sand-skipper. The Diamond Sand-skipper usually has the FW upperside spots larger; males have the sex-brand narrower and shorter; females have the scale-fringe more distinctly chequered brown and white. **Behaviour:** adults fly close to the ground near the larval food plant, and frequently visit flowers. Males select open patches to establish territories by settling on leaf litter and bare ground. Possibly two generations annually, or one variable generation, with adults emerging in spring and autumn. **Habitat:** open-heath and mallee shrubland in semi-arid areas, preferring low-lying sandy areas where the usual larval food plant grows. **Status:** generally rare and very local, but may be common for a few years after fire. **Larval food plants:** usually *Gahnia lanigera* in nw. VIC and SA; also *G. ancistrophylla, G. deusta* in SA.

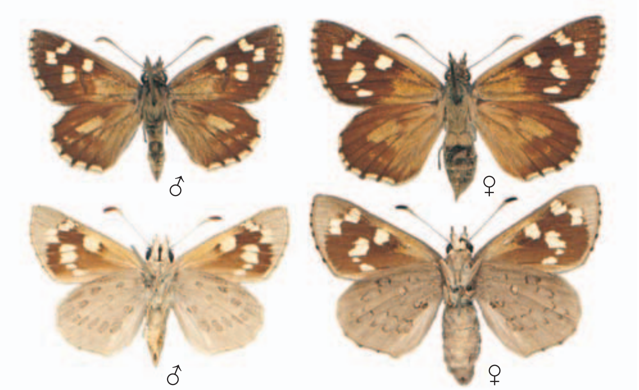
Western Sand-skipper *Antipodia dactyliota*



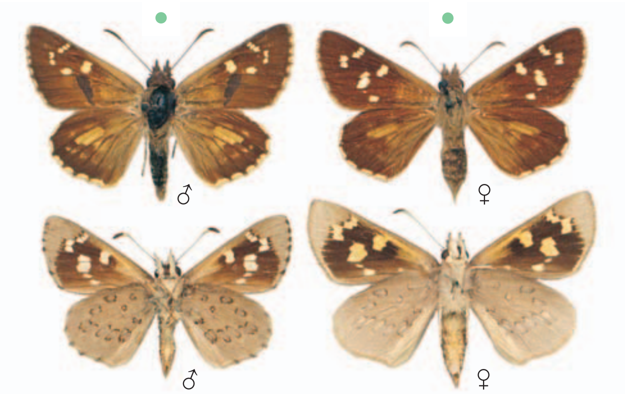
Other name: Western Atralba. **Wingspan:** ♂ 31 mm, ♀ 35 mm. **Similar species:** Diamond Sand-skipper. The Western Sand-skipper usually has the FW upperside spots smaller; males have the sex-brand broader and longer; females have the scale-fringe less distinctly chequered. **Variation:** two subspecies. **Behaviour:** adults fly close to the ground and may feed from flowers, including *Verticordia*. Number of generations completed annually not recorded; adults occur mainly in Oct and Nov, but may appear as early as Aug or as late Jan at the northern and southern ends of the range, respectively. **Habitat:** eucalypt woodland, mallee shrubland, acacia shrubland and mixed mallee-paperbark shrubland in drier coastal and subcoastal areas, where the larval food plants grow on sandy soils or laterite gravel slopes and ridges. **Status:** common but local. **Larval food plant:** usually *Gahnia lanigera*; also *G. australis, G. ancistrophylla.*



Heath Sand-skipper

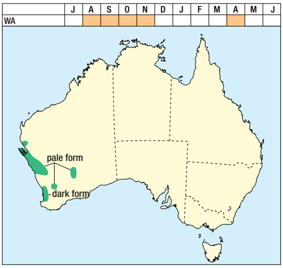


Diamond Sand-skipper



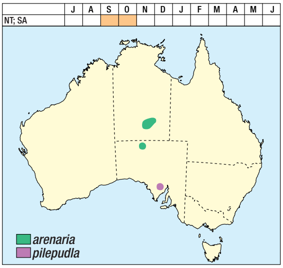
Western Sand-skipper

Yellow Sand-skipper *Croitana croites*



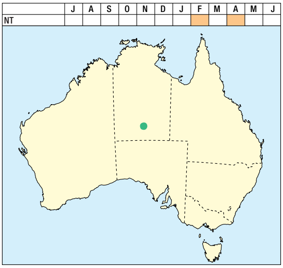
Other name: Croites Skipper. **Wingspan:** ♂ 23 mm, ♀ 27 mm. **Similar species:** Inland Sand-skipper, Desert Sand-skipper. The Yellow Sand-skipper has the termen of the wings less evenly rounded, the HW upperside orange central patch broader, and the HW underside spots between veins $Sc+R_1$ and Rs and between Rs and M_1 well separated compared to the Inland Sand-skipper. It has the wings broader, the underside ground colour yellowish-grey, and the HW upperside orange central patch larger without brown veins compared to the Desert Sand-skipper. **Variation:** two geographical forms. **Behaviour:** adults fly close to the ground amongst tussocks of grasses, and frequently perch, with wings closed, on bare patches of sand or on the yellow flowers of *Conostylis*. Probably one generation annually in coastal-subcoastal areas, with adults flying mainly in spring; possibly a partial second generation in inland areas near Kalgoorlie, WA, with adults emerging in Apr. **Habitat:** heathland on coastal sand dunes, and eucalypt and acacia open-woodland on sand dunes, where scattered clumps of the larval food plants grow. **Status:** common but local. **Larval food plants:** *Austrostipa elegantissima*, *A. platychaeta*, *A. flavescens*.

Inland Sand-skipper *Croitana arenaria*

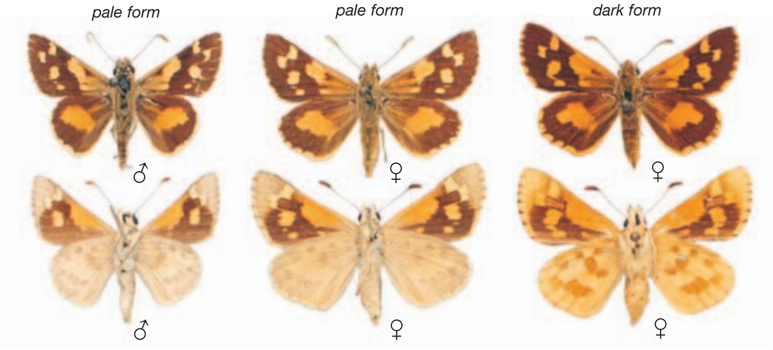


Wingspan: ♂ 22 mm, ♀ 24 mm. **Similar species:** Yellow Sand-skipper, Desert Sand-skipper. The Inland Sand-skipper has the termen of the wings more evenly rounded, the HW underside band between veins $Sc+R_1$ and Rs and between Rs and M_1 continuous with the remainder of the band and not separated into discrete spots, and the HW underside band between veins M_1 and M_3 extending to the termen. It has the HW upperside orange central patch narrower than in the Yellow Sand-skipper. **Variation:** two subspecies. **Behaviour:** males fly rapidly close to the ground and establish territories by settling, with wings closed, on small stones or patches of sand, especially along dry creek beds. Females feed at Asteraceae flowers. Probably one generation annually, with adults emerging in Sep–Oct, although appearance may be irregular depending on timing of rainfall. **Habitat:** open plains, low-lying areas between undulating hills, and along dry creeks and river beds in central arid areas, where the larval food plants grow on compact red sandy soils; mallee shrubland in s. SA. **Status:** common but very local. **Larval food plants:** *Enteropogon acicularis* in NT and nw. SA; *E. ramosus* in nw. SA; *Austrostipa elegantissima, A. platychaeta* in s. SA.

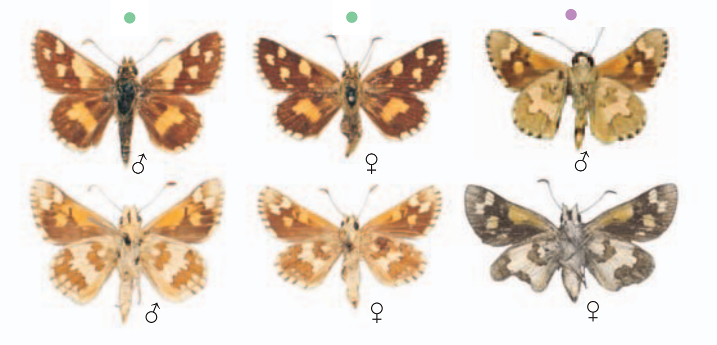
Desert Sand-skipper *Croitana aestiva*



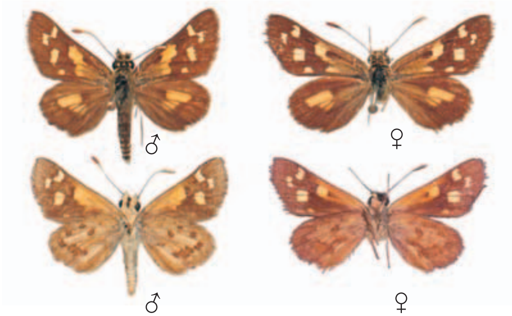
Wingspan: ♂ 23 mm, ♀ 22 mm. **Similar species:** Yellow Sand-skipper, Inland Sand-skipper. The Desert Sand-skipper has the wings narrower, and the HW upperside yellow central patch smaller and divided by brown veins. It has the HW underside spots between veins $Sc+R_1$ and Rs and between Rs and M_1 well separated compared to the Inland Sand-skipper. **Behaviour:** not recorded. Appearance of adults possibly very seasonal and irregular, coinciding with major rainfall events. **Habitat:** adults have been collected in mulga low open-woodland. **Status:** not recorded; apparently restricted, known only from three locations w. of Alice Springs, NT, but possibly more widespread in the central arid zone. **Larval food plant:** not recorded.



Yellow Sand-skipper

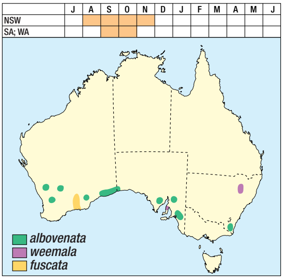


Inland Sand-skipper



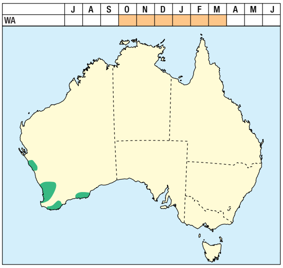
Desert Sand-skipper

White-veined Sand-skipper *Herimosa albovenata*



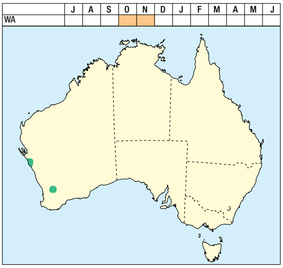
Wingspan: ♂ 27 mm, ♀ 28 mm. **Similar species:** none. The White-veined Sand-skipper has the underside veins white. **Variation:** three subspecies. **Behaviour:** adults fly rapidly during sunshine, close to the ground and just above tussocks of the larval food plant; they occasional feed from flowers or settle on the bare ground or on low vegetation to bask in the sun. One generation annually, with adults emerging mainly in spring; the flight period lasts for only a few weeks at any given locality and varies with latitude, from late Aug to mid Sep in n. NSW, from early Sep to late Oct in SA, and from early Oct early to Nov in s. NSW. **Habitat:** usually tussock grassland on exposed rocky outcrops and low hills, often on limestone and alkaline soils, where the larval food plants grow; also grassy open-woodland, and grassy shrubland or heathland on sand dunes. **Status:** common but very local; vulnerable in SA. **Larval food plants:** *Austrostipa scabra* in NSW and SA; also *A. eremophila*, *A. semibarbata* in se. SA.

Blue Iris-skipper *Mesodina cyanophracta*

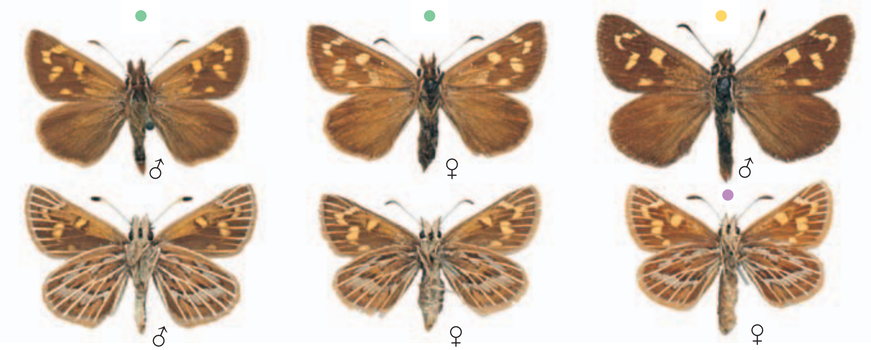


Other name: Cyanophracta Skipper. **Wingspan:** ♂ 30 mm, ♀ 31 mm. **Similar species:** Eastern Iris-skipper, Northern Iris-skipper, Narrow-winged Iris-skipper. The Blue Iris-skipper has the underside ground colour bluish-grey with an iridescent sheen. FW broader than in the Narrow-winged Iris-skipper; males usually have a subapical band of spots on the FW. **Behaviour:** adults fly rapidly close to the ground, within about 1 m, and rarely settle; they feed at flowers when available. One generation annually, with adults emerging over an extended period between late Oct and Mar, but with a peak in abundance in Nov near Perth. **Habitat:** banksia woodland and jarrah woodland, where the larval food plant grows on sand, especially in areas where the food plants exhibit new regrowth after disturbance such as fire. **Status:** common but very local. **Larval food plant:** *Patersonia occidentalis*.

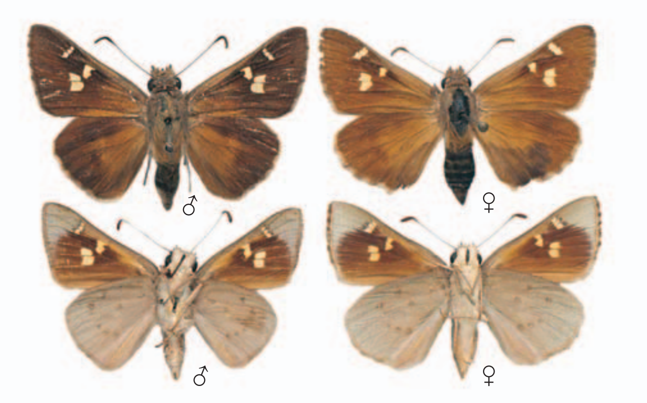
Narrow-winged Iris-skipper *Mesodina hayi*



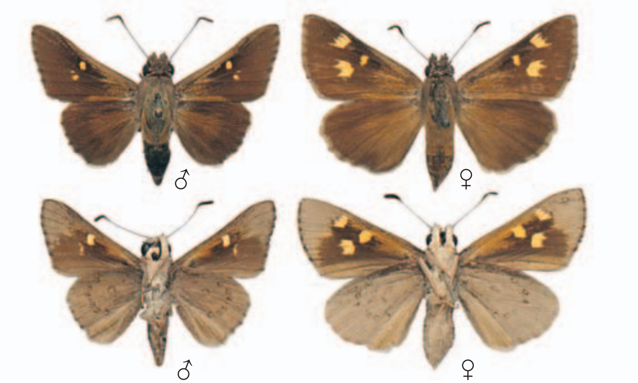
Other name: Small Iris-skipper. **Wingspan:** ♂ 28 mm, ♀ 32 mm. **Similar species:** Blue Iris-skipper. The Narrow-winged Iris-skipper has the FW narrower, the underside ground colour dull grey-brown, and the HW underside spots or rings slightly more distinct; males lack a subapical band of spots on the FW. **Variation:** the FW postmedian spots vary in extent, and are sometimes absent, in males. **Behaviour:** adults patrol rapidly over the ground and around the larval food plants, within about 1 m, and rarely settle. Probably one generation annually, with adults emerging in Oct and Nov. **Habitat:** sheoak heath-shrubland on sand-plains, where the larval food plant grows on sandy loam over well drained gentle slopes. Occurs together with the Blue Iris-skipper at Kalbarri, WA. **Status:** uncommon, local and restricted to two disjunct areas in WA, near Quairading, and north of the Murchison River and Kalbarri National Park. **Larval food plant:** *Patersonia drummondii*.



White-veined Sand-skipper



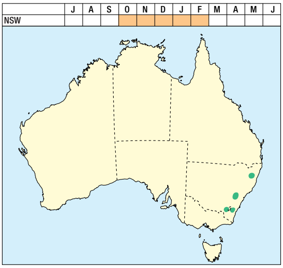
Blue Iris-skipper



Narrow-winged Iris-skipper

Montane Iris-skipper *Mesodina aeluropis*

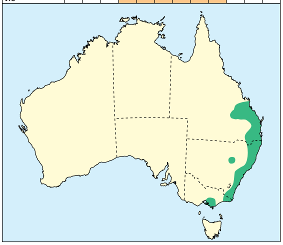
	J	A	S	O	N	D	J	F	M	A	M	J
NSW				🟧	🟧	🟧	🟧	🟧				



Other names: Aeluropis Skipper, Mountain Skipper. **Wingspan:** ♂ 33 mm, ♀ 35 mm. **Similar species:** Heath Sand-skipper. The Montane Iris-skipper has only four yellow central spots on the FW upperside, the two white subterminal spots being absent, and has the underside ground colour greyer without the rich purple suffusion; males lack a sex-brand. **Behaviour:** adults fly rapidly during sunshine, close to the ground; they occasionally settle on rocks and shrubs to bask in the sun, or feed from flowers such as *Pimelea*. Probably only one generation annually, with adults emerging over an extended period between Oct and Feb. **Habitat:** subalpine woodland and grassland, from 820 to 1270 m, preferring damp heath or open grassy areas adjacent to streams and along gullies where the specific form of the larval food plant grows. **Status:** common but local and restricted to four disjunct areas along the Great Dividing Range: New England Tableland, Blue Mountains, Tallaganda State Forest and Kosciuszko National Park, NSW. **Larval food plant:** a distinct form of *Patersonia sericea* with slightly broader and bluer leaves.

Eastern Iris-skipper *Mesodina halyzia*

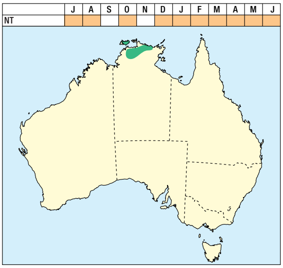
	J	A	S	O	N	D	J	F	M	A	M	J
NSW (N)		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	
VIC				🟧	🟧	🟧	🟧	🟧	🟧			



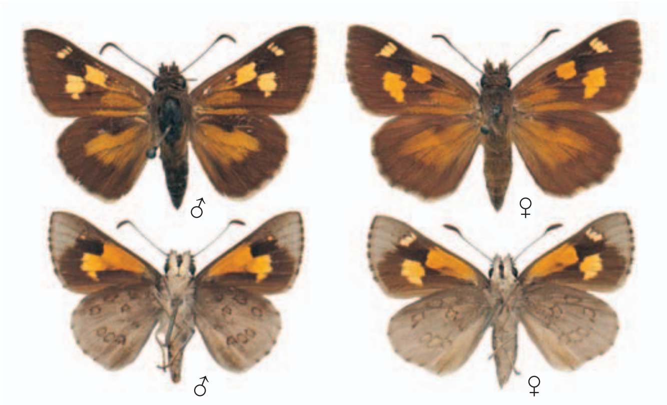
Other name: Halyzia Skipper. **Wingspan:** ♂ 31 mm, ♀ 33 mm. **Similar species:** Northern Iris-skipper, Blue Iris-skipper. Eastern Iris-skipper males lack three subapical spots on the FW. It has the edges of the HW underside rings indistinct compared to the Northern Iris-skipper. It has the underside ground colour pinkish-grey compared to the Blue Iris-skipper. **Variation:** underside ground colour, and clarity of HW underside markings and rings vary. **Behaviour:** adults fly close to the ground and may feed from flowers, including *Kunzea* and *Pimelea*. Males fly in very open areas where they perch on stones and patches of sand to establish territories during the afternoon. Probably two generations annually in QLD and ne. and cc. NSW, but probably only one generation in VIC, with adults emerging over an extended period between Oct and Mar. **Habitat:** heathland and moister eucalypt open-forest with a heath understorey in coastal and subcoastal areas, where the larval food plants grow on sandy soils such as sandstone and granite. **Status:** common but local. **Larval food plants:** *Patersonia fragilis, P. glabrata, P. sericea, P. occidentalis.*

Northern Iris-skipper *Mesodina gracillima*

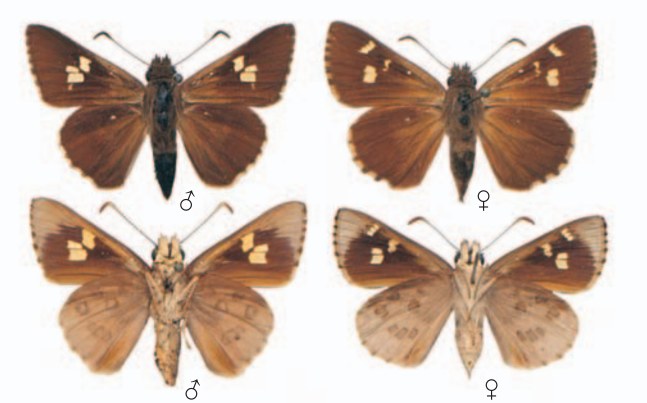
	J	A	S	O	N	D	J	F	M	A	M	J
NT	🟧	🟧		🟧		🟧	🟧	🟧	🟧	🟧	🟧	🟧



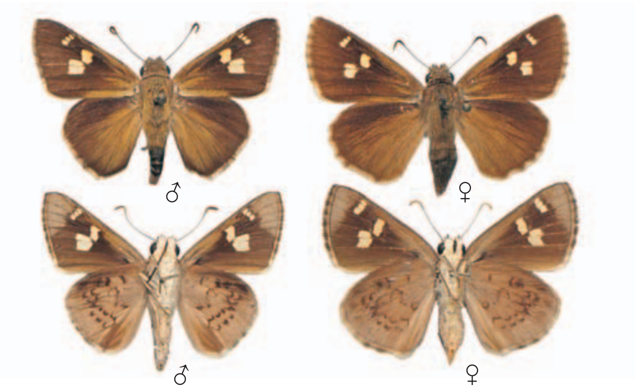
Wingspan: ♂ 27 mm, ♀ 31 mm. **Similar species:** Eastern Iris-skipper, Blue Iris-skipper. The Northern Iris-skipper has the edges of the HW underside rings very distinct and sharply defined compared to the Eastern Iris-skipper; males usually have a subapical band of three spots on the FW. Underside ground colour pinkish-grey or reddish-grey compared to the Blue Iris-skipper. **Behaviour:** adults fly close to the ground and feed from flowers. Males establish territories by perching on the ground in selected areas. Females usually observed flying more slowly close to the larval food plants. Number of generations completed annually not recorded; adults are apparently more abundant towards the end of the wet season. **Habitat:** eucalypt woodland with a sparse understorey of grasses and herbs, where the larval food plant grows on well drained sandy soils, often on gently sloping terrain. **Status:** common but local. **Larval food plant:** *Patersonia macrantha*.



Montane Iris-skipper

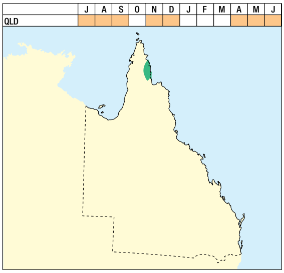


Eastern Iris-skipper



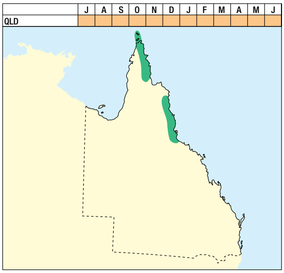
Northern Iris-skipper

Blue-flash Skipper *Rachelia extrusus*

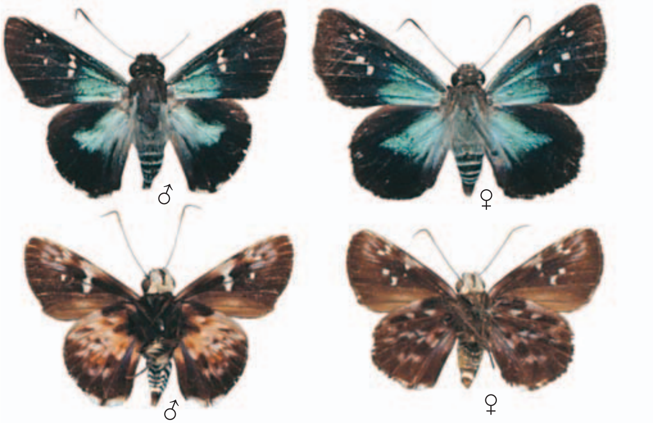


Wingspan: ♂ 32 mm, ♀ 33 mm. **Similar species:** Greater Peacock Awl, Peacock Awl. The Blue-flash Skipper is smaller, and has the HW tornus rounded and not produced. **Behaviour:** males establish territories by perching on leaves of trees in sunlit patches in the forest canopy, 10–15 m or more above the ground, usually in gaps in the forest or along the edges of tracks. Females have been observed closer to ground feeding from flowers, including *Stachytarpheta*. Probably several generations completed annually; adults occur sporadically throughout the year. **Habitat:** lowland tropical rainforest, preferring the forest floor under a closed canopy where the larval food plant grows. **Status:** rarely seen and restricted to Cape York Peninsula, from Iron Range to the Rocky River on the se. edge of the McIlwraith Range, QLD. **Larval food plant:** small forms of *Flagellaria indica*.

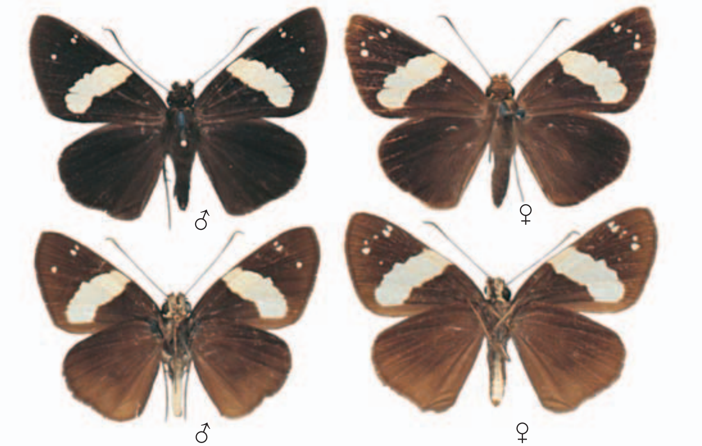
Banded Demon *Notocrypta waigensis*



Wingspan: ♂ 35 mm, ♀ 38 mm. **Similar species:** none. The Banded Demon has a conspicuous white median band on the FW. **Behaviour:** adults have a short swift flight and readily feed from flowers. Probably several generations completed annually. **Habitat:** usually tropical rainforest in the higher rainfall areas, where the larval food plants grow; also drier isolated patches of monsoon forest on central Cape York Peninsula, QLD. **Status:** common but local. **Larval food plants:** *Hornstedtia scottiana* on Cape York Peninsula; *Alpinia caerulea* in the Wet Tropics, QLD.

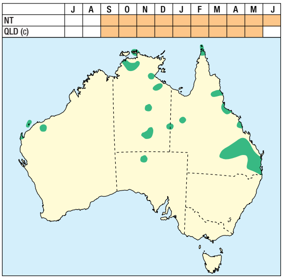


Blue-flash Skipper



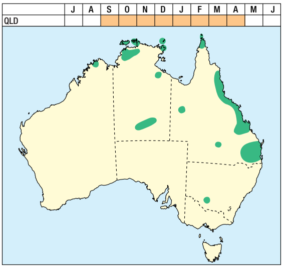
Banded Demon

Large Yellow Grass-dart *Taractrocera anisomorpha*



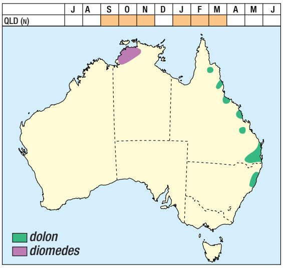
Other name: Orange Grass-dart. **Wingspan:** ♂ 22 mm, ♀ 26 mm. **Similar species:** No-brand Grass-dart, River-sand Grass-dart, Rock Grass-dart, White-banded Grass-dart. Large Yellow Grass-dart males have the sex-brand forming a narrow broken black line, the FW costa longer with the apex more pointed and termen straighter, and the FW upperside orange markings generally more extensive. **Behaviour:** adults fly during sunshine and feed from flowers. Males settle close to the ground in more open areas and commonly hilltop. Number of generations completed annually probably varies, especially in the arid zone where adults occur more sporadically following periods of rainfall. **Habitat:** drier eucalypt woodlands in QLD; banks of dry river beds and on rocky outcrops near temporary watercourses in c. Australia, preferring the more sheltered and shaded sites where tussocks of the larval food plant grow. **Status:** common but local. **Larval food plants:** *Eulalia aurea* in s. NT; *Setaria paspalidioides* in c. QLD; also **Sorghum bicolor*.

No-brand Grass-dart *Taractrocera ina*

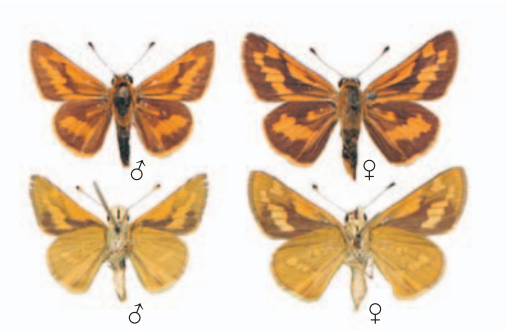


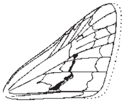
Other name: Ina Grass-dart. **Wingspan:** ♂ 22 mm, ♀ 25 mm. **Similar species:** Large Yellow Grass-dart, River-sand Grass-dart, Rock Grass-dart, White-banded Grass-dart. No-brand Grass-dart males lack a sex-brand on the FW. Males have the FW costa longer and apex more pointed than in males of the River-sand and Rock Grass-darts and western subspecies of the White-banded Grass-dart (*T. p. agraulia*); females are generally larger, and lack an orange median spot between veins Rs and M_1 on the HW upperside. **Behaviour:** adults fly rapidly close to the ground, within about 1 m, in open grassy areas; they frequently settle at the tops of tall grass. Males, unlike the Large Yellow Grass-dart, do not hilltop. Number of generations completed annually not recorded; adult abundance apparently varies seasonally. **Habitat:** eucalypt open-forest and woodland; also open grassy areas in the arid zone. **Status:** common but very local. **Larval food plants:** Poaceae, including **Cymbopogon citrata,* **Oryza sativa,* **Panicum maximum,* **Paspalum conjugatum,* **Paspalum urvillei,* **Sorghum verticilliflorum,* **Urochloa decumbens*. Native food plants not recorded.

River-sand Grass-dart *Taractrocera dolon*

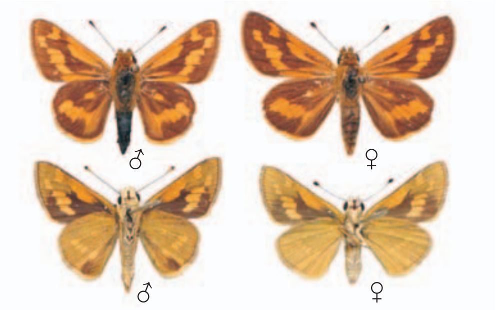


Other names: Small Yellow Grass-dart, Dingy Grass-dart. **Wingspan:** ♂ 18 mm, ♀ 20 mm. **Similar species:** Large Yellow Grass-dart, No-brand Grass-dart, Rock Grass-dart, White-banded Grass-dart. River-sand Grass-dart males have the sex-brand consisting of three discrete elliptical black patches. Males have the FW apex less pointed and termen more rounded than in males of the Large Yellow and No-brand Grass-darts; females are smaller, have the upperside orange markings less extensive, and possess a small orange spot between veins Rs and M_1 on the HW upperside. It has the HW underside postmedian band less distinct than in the Rock Grass-dart and broader and slightly more curved than in the western subspecies of the White-banded Grass-dart (*T. p. agraulia*). **Variation:** two subspecies. **Behaviour:** adults fly low to the ground amongst grasses; they readily feed from flowers of *Xanthorrhoea* in spring. Number of generations completed annually not recorded. **Habitat:** eucalypt open-forest and banksia heathland (wallum) in coastal and subcoastal areas, preferring sandy banks of creeks and rivers. **Status:** generally uncommon and local. **Larval food plants:** Poaceae, including **Sorghum verticilliflorum*. Native food plants not recorded.

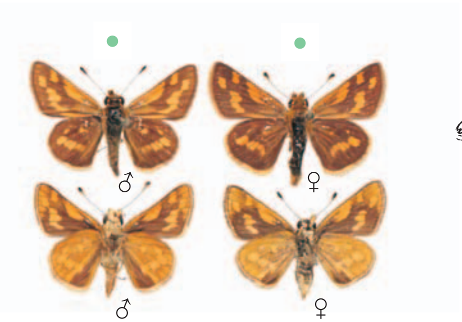


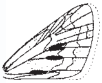


Large Yellow Grass-dart



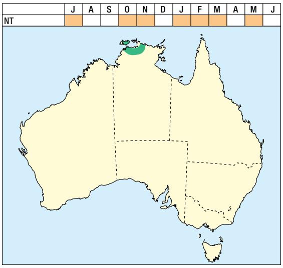
No-brand Grass-dart





River-sand Grass-dart

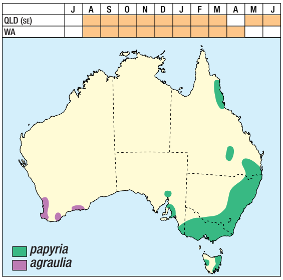
Rock Grass-dart *Taractrocera ilia*



	J	A	S	O	N	D	J	F	M	A	M	J
NT	🟧			🟧	🟧		🟧	🟧	🟧		🟧	

Other name: Northern Grass-dart. **Wingspan:** ♂ 20 mm, ♀ 19 mm. **Similar species:** Large Yellow Grass-dart, No-brand Grass-dart, River-sand Grass-dart, White-banded Grass-dart. Rock Grass-dart males have the sex-brand forming a broad broken black band; females are smaller, and have the HW underside postmedian band more conspicuous and distinct. Females have the upperside orange markings more extensive than in females of the No-brand and River-sand Grass-darts and the western subspecies of the White-banded Grass-dart (*T. p. agraulia*). **Behaviour:** adults fly close to the ground during the early morning and late afternoon; during the heat of the day they rest on the ground in the shade of small rock overhangs. Number of generations completed annually not recorded; adults appear to be seasonal, being more abundant in Feb and Mar. **Habitat:** adults have been collected in open rocky areas, including those near sandstone escarpments, with little grass. **Status:** common but very local and restricted to n. NT. **Larval food plant:** not recorded.

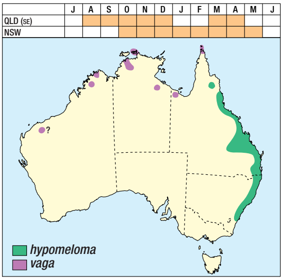
White-banded Grass-dart *Taractrocera papyria*



	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		🟧	🟧
WA		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		

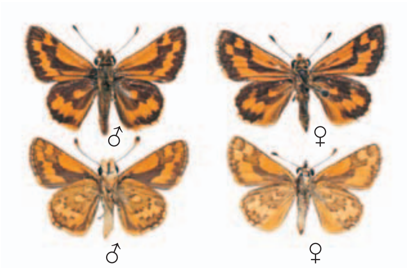
Other names: White Grass-dart, Western Grass-dart. **Wingspan:** ♂ 19 mm, ♀ 20 mm. **Similar species:** Large Yellow Grass-dart, No-brand Grass-dart, River-sand Grass-dart, Rock Grass-dart. White-banded Grass-dart males have the sex-brand forming a narrow black line. The eastern subspecies (*T. p. papyria*) has a conspicuous white band on the HW underside. The western subspecies (*T. p. agraulia*) has the HW postmedian band straight and relatively narrow, and the upperside orange markings less extensive. **Variation:** two subspecies. **Behaviour:** adults fly close to the ground in grassy areas, and often perch on leaves of grass tussocks or on bare ground between the tussocks. When basking, the FWs are opened only slightly over the body while the HWs are held flat. Probably more than one generation annually; flight period extends from Oct or Nov to Apr or May in VIC and TAS. **Habitat:** grassland, eucalypt open-woodland and woodland, from the coast and tablelands to drier inland areas of the Great Dividing Range in se. Australia, mainly at higher altitudes in ne. QLD; also suburban areas in WA. **Status:** generally uncommon but widespread. **Larval food plants:** *Austrodanthonia, Austrostipa, Cynodon, Echinopogon, Imperata, Microlaena, Phragmites, Poa, *Ehrharta, *Oryza, *Paspalum, *Pennisetum, Carex.*

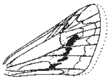
White-margined Grass-dart *Ocybadistes hypomeloma*



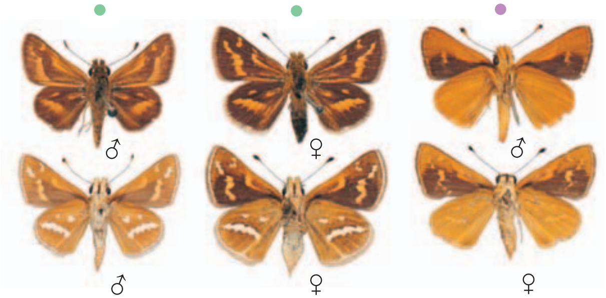
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)		🟧	🟧	🟧	🟧	🟧			🟧	🟧		
NSW				🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	

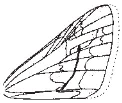
Other name: Pale Orange Dart. **Wingspan:** ♂ 23 mm, ♀ 24 mm. **Similar species:** Narrow-brand Grass-dart, Greenish Grass-dart, Black Grass-dart, Orange Grass-dart, Wide-brand Grass-dart. The White-margined Grass-dart has a white streak along the HW underside dorsum; males have the sex-brand forming a continuous black line sharply bent in the middle. **Variation:** two subspecies. **Behaviour:** adults fly close to the ground amongst grasses, and may feed from flowers such as *Lantana*; when settled they flick their wings in a characteristic, rapid manner that is more obvious than in other Grass-darts. Males establish territories by perching on prominent seed heads of the food plant. Possibly two generations annually. **Habitat:** open-woodland and grassland in cc. NSW, preferring areas where dense patches of the usual larval food plant grows; rarely in disturbed areas that have been invaded by exotic grasses. **Status:** generally uncommon and local. **Larval food plants:** usually *Themeda triandra* in cc. NSW; also *Microlaena stipoides.*



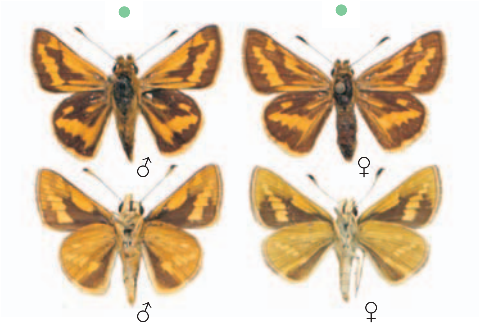


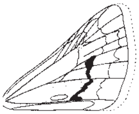
Rock Grass-dart





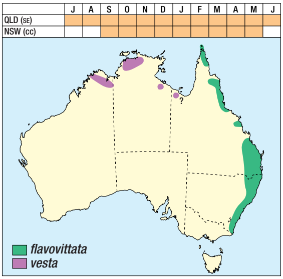
White-banded Grass-dart





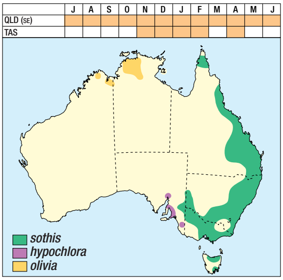
White-margined Grass-dart

Narrow-brand Grass-dart *Ocybadistes flavovittata*



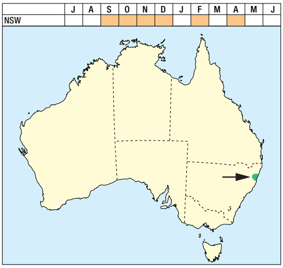
Other name: Common Dart. **Wingspan:** ♂ 19 mm, ♀ 20 mm. **Similar species:** White-margined Grass-dart, Greenish Grass-dart, Black Grass-dart, Orange Grass-dart, Wide-brand Grass-dart. Narrow-brand Grass-dart males have the sex-brand forming a relatively straight and narrow black line. Males have the FW upperside orange markings less connected, especially the spot in the cell and subapical band which are usually well-separated, compared to Greenish Grass-dart males; females usually lack the orange anterior spot above vein M_1 on the HW upperside, and have the underside ground colour dull yellow-orange without the green suffusion. **Variation:** two subspecies. **Behaviour:** adults fly close to the ground amongst grasses. Number of generations completed annually not recorded. **Habitat:** eucalypt open-forest and woodland on the coast and tablelands in se. QLD and NSW, preferring open grassy areas; also suburban gardens. **Status:** common and widespread. **Larval food plants:** Poaceae.

Greenish Grass-dart *Ocybadistes walkeri*

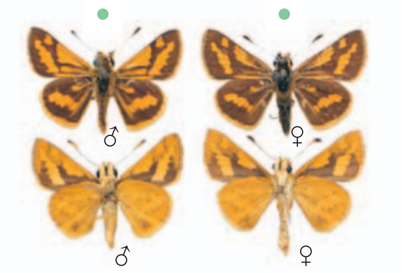


Other names: Yellow-banded Dart, Southern Dart. **Wingspan:** ♂ 20 mm, ♀ 20 mm. **Similar species:** White-margined Grass-dart, Narrow-brand Grass-dart, Black Grass-dart, Orange Grass-dart, Wide-brand Grass-dart. Greenish Grass-dart males have the sex-brand forming a broad regular black band sharply curved at the posterior end. Males have the spot in the FW upperside cell usually joined to the subapical band compared to Narrow-brand Grass-dart males; females have an orange anterior spot usually separated from the postmedian band on the HW upperside, and the underside ground colour suffused green. **Variation:** three subspecies. **Behaviour:** adults fly close to the ground and readily feed from flowers; they often perch on grass and other low objects to bask in sunlight. Probably several generations completed annually. **Habitat:** eucalypt open-forest in se. Australia, up to 1500 m in VIC; also suburban gardens; has recently invaded c. VIC. **Status:** common and widespread. **Larval food plants:** *Cynodon dactylon, Imperata cylindrica, Thuarea involuta*, **Brachypodium, *Bromus, *Ehrharta, *Lolium, *Panicum, *Paspalum, *Pennisetum.*

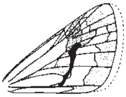
Black Grass-dart *Ocybadistes knightorum*

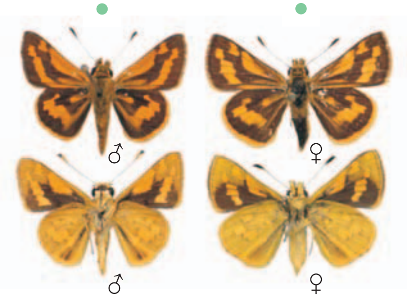


Other name: Knight's Dart. **Wingspan:** ♂ 19 mm, ♀ 18 mm. **Similar species:** White-margined Grass-dart, Narrow-brand Grass-dart, Greenish Grass-dart, Orange Grass-dart. The Black Grass-dart has the upperside orange markings less extensive, especially the FW bands and spots which are well-separated, the underside yellow suffusion less extensive, and the HW underside postmedian band very conspicuous. **Behaviour:** adults fly close to the larval food plant, between mid morning and mid afternoon, and occasionally feed from flowers of herbs and *Lantana*. During the morning males select open sunlit patches where they establish territories by perching close to ground on leaves of the food plant, sticks and dead leaves. Females fly more slowly and frequently hover and settle in shaded areas on leaves of the food plant, especially during the afternoon. Probably two or more generations annually. **Habitat:** coastal lowland sheoak open-forest with an open grassy understorey, comprising extensive patches of the larval food plant, in semi-saline areas of the king tide zone above mangrove. **Status:** common but very local and restricted to cc. NSW, near Coffs Harbour; some sites vulnerable. **Larval food plant:** *Alexfloydia repens.*

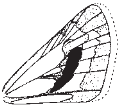


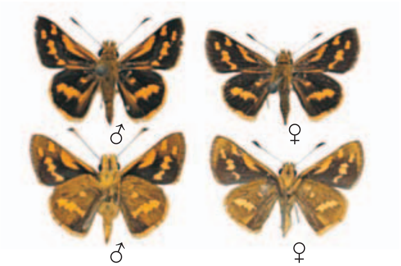
Narrow-brand Grass-dart



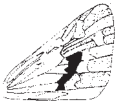


Greenish Grass-dart



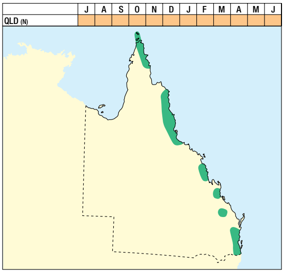


Black Grass-dart



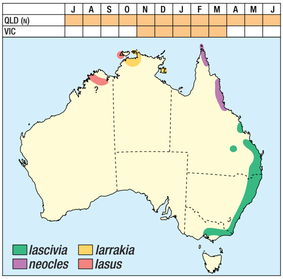
K.J. Maybour

Orange Grass-dart *Ocybadistes ardea*



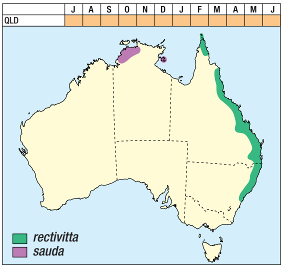
Other name: Dark Orange Dart. **Wingspan:** ♂ 18 mm, ♀ 18 mm. **Similar species:** White-margined Grass-dart, Narrow-brand Grass-dart, Greenish Grass-dart, Black Grass-dart. The Orange Grass-dart is smaller, has the orange upperside markings darker, the spot in the FW upperside cell separated from the subapical band, and the HW underside postmedian band edged with dark brown; males have the sex-brand comprising two elliptical black patches on veins CuA$_2$ and 1A+2A. **Behaviour:** adults fly close to the ground amongst rocks and grasses, usually in natural openings such as along creeks or along edges of the forest. Number of generations completed annually not recorded; adults may be abundant seasonally. **Habitat:** adults have been collected in lowland rainforest. Occurs sporadically from the Torres Strait islands to Burleigh Heads, QLD. **Status:** generally uncommon and local. **Larval food plant:** not recorded.

Dark Grass-dart *Suniana lascivia*

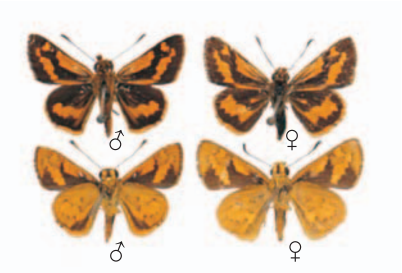


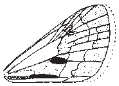
Other names: Dingy Grass-dart, Northern Dingy Dart, Larrakia Dart. **Wingspan:** ♂ 21 mm, ♀ 22 mm. **Similar species:** Wide-brand Grass-dart, White-margined Grass-dart. The eastern subspecies of the Dark Grass-dart (*S. l. lascivia, S. l. neocles*) usually have the upperside orange-yellow markings narrower compared to the Wide-brand Grass-dart; males have the sex-brand comprising a small elliptical black patch near the dorsum. Females of the northern subspecies (*S. l. larrakia*) have the underside ground colour darker orange, and often the HW underside yellow-orange postmedian band more sharply defined and edged with darker and broader brown crescent lines than in Wide-brand Grass-dart females. **Variation:** four subspecies. **Behaviour:** adults fly slowly close to the ground amongst dense swards of the larval food plant and other grasses. Probably several generations completed annually. **Habitat:** lowland eucalypt open-forest, and coastal paperbark woodland and swampland on the eastern coast, preferring areas where the native larval food plant grows abundantly; also upland eucalypt tall open-forest with a grassy understorey. **Status:** common but local. **Larval food plants:** *Imperata cylindrica* in NSW; **Panicum maximum*.

Wide-brand Grass-dart *Suniana sunias*

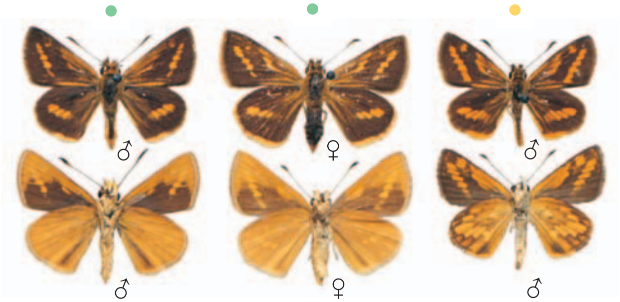


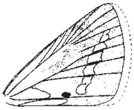
Other names: Orange Dart, Southern Orange Dart. **Wingspan:** ♂ 21 mm, ♀ 22 mm. **Similar species:** Dark Grass-dart, Narrow-brand Grass-dart, Greenish Grass-dart. The Wide-brand Grass-dart has the upperside orange markings broader compared to the eastern subspecies of the Dark Grass-dart (*S. l. lascivia, S. l. neocles*); males have the sex-brand forming a broad black patch, broken at each vein and between veins CuA$_2$ and 1A+2A. FW underside subterminal spots continuing in a straight line with the postmedian band, and the HW underside postmedian band divided by dark veins and the edges more distinct compared to the Narrow-brand and Greenish Grass-darts. **Variation:** two subspecies. **Behaviour:** adults fly rapidly close to the ground amongst grasses. Males establish territories by perching on particular leaves of grass. Probably several generations completed annually. **Habitat:** eucalypt woodland and open-forest, especially in wetter coastal areas; grassy clearings adjacent to subtropical rainforest in se. QLD and ne. NSW; also suburban gardens where grasses are left uncut. **Status:** generally common and widespread; less common in cc. NSW. **Larval food plants:** *Leersia hexandra* in QLD; **Panicum*, **Paspalum*, **Sorghum*.



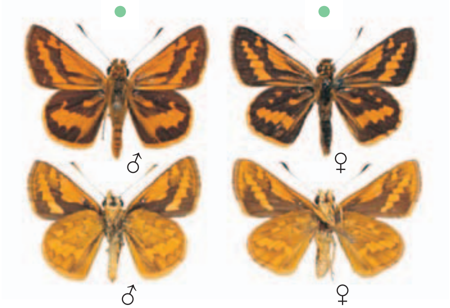


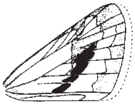
Orange Grass-dart





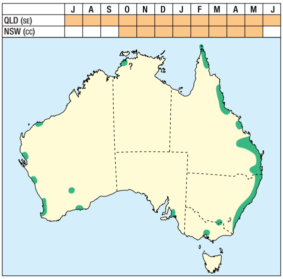
Dark Grass-dart





Wide-brand Grass-dart

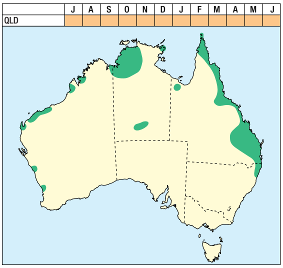
Orange Palm-dart *Cephrenes augiades*



	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
NSW (CC)				🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	

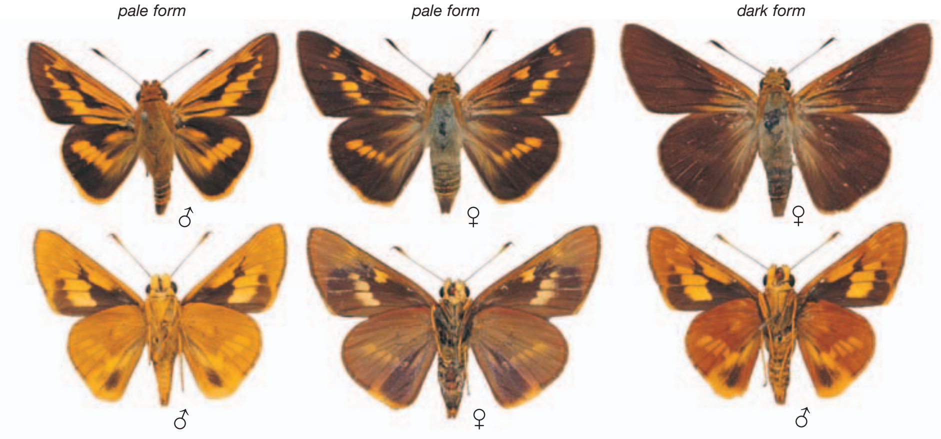
Wingspan: ♂ 37 mm, ♀ 41 mm. **Similar species:** Yellow Palm-dart, Northern Large Darter, Southern Large Darter, Yellow-streaked Swift. Orange Palm-dart males have the upperside orange markings less extensive, and lack a brown-black edge to the HW underside postmedian band compared to Yellow Palm-dart males. Females have the upperside orange markings and spots paler and less clearly defined than in Northern Large Darter females. Underside ground colour dark purplish-brown or occasionally pale yellow-brown faintly suffused with iridescent green or purple compared to Southern Large Darter females. Males are larger and have upperside orange markings more extensive than in both sexes of the Yellow-streaked Swift. **Variation:** two polymorphic forms. **Behaviour:** adults fly rapidly and readily feed from flowers. Males establish territories by perching 2–4 m above the ground, or sometimes higher in the canopy, on an exposed leaf or branch, usually near the food plant; they aggressively chase and drive off males and other passing insects, returning to settle on the same leaf. Probably several generations completed annually, with adults flying during most or all months of the year. **Habitat:** tropical and subtropical rainforest in QLD and NSW; also suburban gardens, nurseries and botanic gardens where native and exotic palms are grown; has recently become established beyond its natural range in NT, VIC, SA and WA through accidental introductions. **Status:** common and widespread. **Larval food plants:** *Archontophoenix, Arenga, Calamus, Carpentaria, Hydriastele, Laccospadix, Licuala, Livistona, Ptychosperma, Rhopalostylis, Wodyetia.*

Yellow Palm-dart *Cephrenes trichopepla*

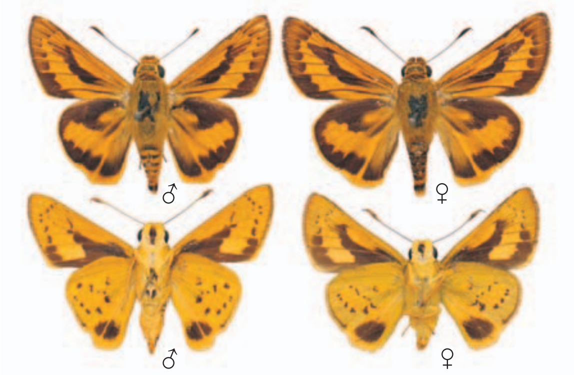


	J	A	S	O	N	D	J	F	M	A	M	J
QLD	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧

Wingspan: ♂ 34 mm, ♀ 36 mm. **Similar species:** Orange Palm-dart, Pale-orange Darter. Yellow Palm-dart males have the upperside orange-yellow markings more extensive, which on the FW, extend along the veins towards the termen, and have the HW underside postmedian band edged with brown-black compared to Orange Palm-dart males. It is larger, and has a dark tornal patch on the HW underside compared to the Pale-orange Darter; males lack a sex-brand. **Behaviour:** males establish territories by perching on or near the larval food plants and near nectar sources about 1–3 m above the ground with wings closed or with the FWs partially opened and the HWs spread flat; they fly rapidly and aggressively chase off rival males and other passing insects, returning to settle at the same spot. Several generations completed annually, with adults flying throughout the year in QLD. **Habitat:** tropical and subtropical eucalypt open-forest and woodland in NT and QLD; also suburban gardens and parkland where native and exotic palms are grown; has recently spread south into NSW, also now established far beyond its natural range on the western coast of WA and c. Australia through accidental introduction. **Status:** common and widespread. **Larval food plants:** *Archontophoenix, Livistona, Ptychosperma, Wodyetia.*



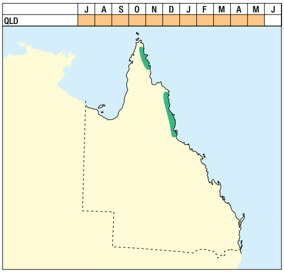
Orange Palm-dart



Yellow Palm-dart

Northern Sedge-darter *Telicota eurotas*

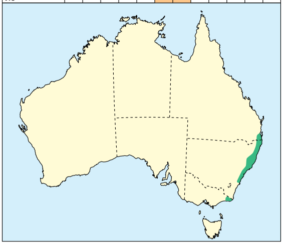
	J	A	S	O	N	D	J	F	M	A	M	J
QLD	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	



Other names: Dingy Darter, Sedge Darter. **Wingspan:** ♂ 30 mm, ♀ 31 mm. **Similar species:** Southern Sedge-darter, darters. The Northern Sedge-darter has the upperside orange markings darker, the FW upperside subapical band of spots separated from the orange costal streak, the spot in the HW upperside cell smaller, the HW upperside postmedian band broader, the HW underside orange postmedian band very broad and divided by brown veins, and the underside ground colour darker orange compared to the Southern Sedge-darter. **Behaviour:** adults fly close to the ground near the larval food plants. Possibly two generations annually, with adults most abundant in Sep–Oct and again in Mar–Apr. **Habitat:** lowland paperbark swampland and rainforest edge in wet remnant coastal areas of Cape York Peninsula and the Wet Tropics, QLD, preferring swampy areas where the larval food plants grow. **Status:** generally uncommon and very local. **Larval food plants:** *Scleria ciliaris, S. polycarpa, S. sumatrensis.*

Southern Sedge-darter *Telicota eurychlora*

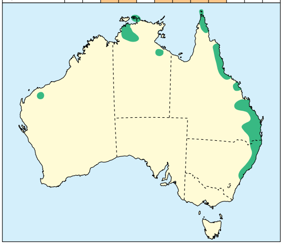
	J	A	S	O	N	D	J	F	M	A	M	J
NSW			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		
VIC						🟧	🟧					



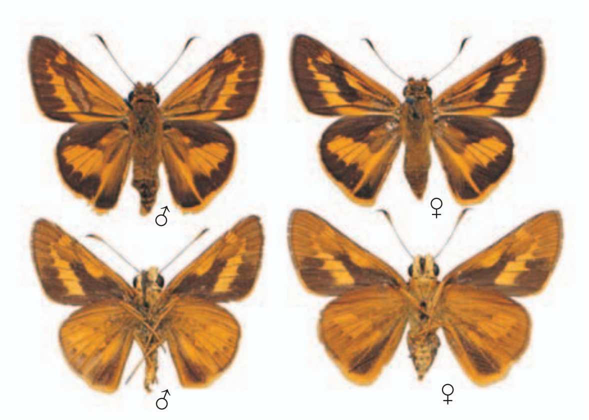
Other names: Dingy Darter, Sedge Darter. **Wingspan:** ♂ 28 mm, ♀ 31 mm. **Similar species:** Northern Sedge-darter, darters. The Southern Sedge-darter has the upperside orange markings paler, the FW upperside subapical band of spots usually connected to the orange costal streak, the spot in the HW upperside cell larger, the HW upperside postmedian band narrower, the HW underside postmedian band indistinct, and the underside ground colour paler orange compared to the Northern Sedge-darter. **Behaviour:** adults fly amongst clumps of the larval food plant, and occasionally feed from flowers in woodland adjacent to the breeding habitats. Probably two generations annually in cc. NSW, with adults more abundant in early summer and again in autumn. **Habitat:** coastal swamps and wetlands, preferring estuarine habitats where the larval food plant grows in flowing brackish-water or sometimes fresh-water along creeks and small streams; also upland swamps in rainforest in se. QLD and ne. NSW. **Status:** common but very local; vulnerable. **Larval food plant:** *Cladium procerum* in coastal lowlands; possibly *Carex gaudichaudiana* in subcoastal uplands.

Pale-orange Darter *Telicota colon*

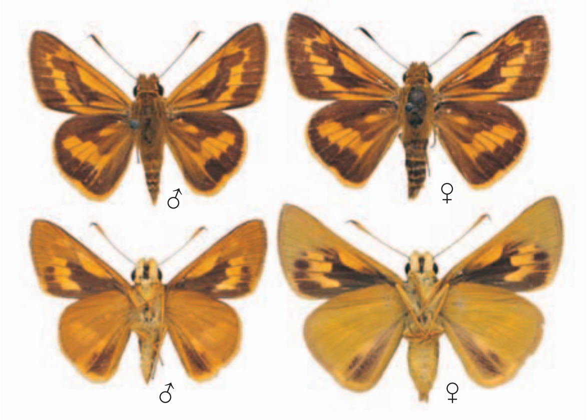
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (N)	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
NSW			🟧	🟧		🟧	🟧	🟧	🟧			



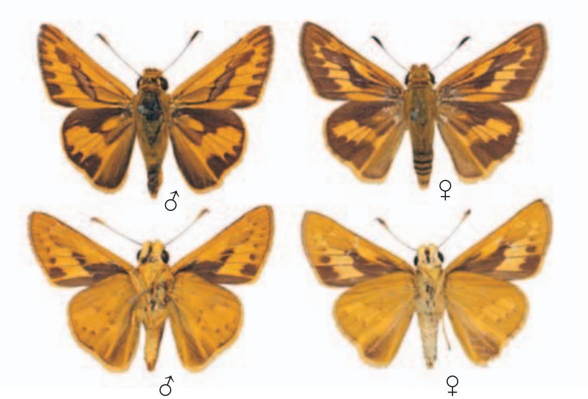
Other name: Pale Darter. **Wingspan:** ♂ 27 mm, ♀ 29 mm. **Similar species:** darters, Yellow Palm-dart. The Pale-orange Darter has the upperside yellow-orange markings paler, and the outer edge of the FW upperside postmedian band extending along the veins to the termen compared to other darters; males have the sex-brand grey and broad. It is smaller, and lacks a dark tornal patch on the HW underside compared to the Yellow Palm-dart. **Behaviour:** adults usually fly close to the ground amongst grasses, and readily feed from flowers. During midday males fly near the tops of trees and establish territories by perching in the upper canopy of shrubs and trees 5–8 m from the ground in cc. NSW. Two generations annually in cc. NSW. **Habitat:** eucalypt woodland and open-forest with a grassy understorey in se. QLD; edges of mangrove and estuarine wetlands where the *Phragmites* food plant grows in cc. NSW; also suburban areas if grasses left unmown. **Status:** common but local. **Larval food plants:** *Chrysopogon fallax* in WA; *Ophiuros exaltatus, *Miscanthus sinensis, *Sorghum* in QLD; *Phragmites australis* in cc. NSW.



Northern Sedge-darter

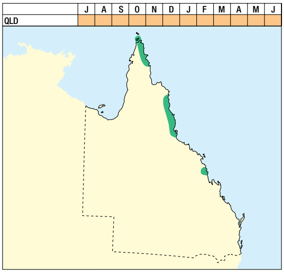


Southern Sedge-darter



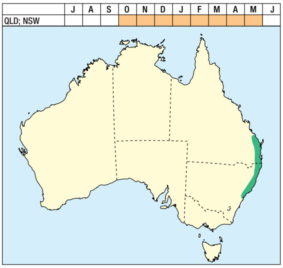
Pale-orange Darter

Northern Large Darter *Telicota ohara*



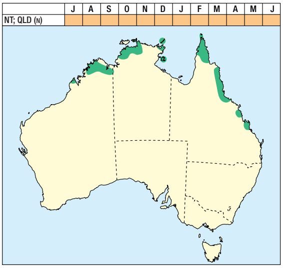
Other name: Dark Darter. **Wingspan:** ♂ 31 mm, ♀ 34 mm. **Similar species:** darters, Orange Palm-dart. The Northern Large Darter is larger and has the dark brown underside ground colour (when freshly emerged) suffused with yellow compared to other darters. Males have the outer edge of the FW upperside orange postmedian band less extended along the veins to the termen than in Southern Large Darter males; females usually have the upperside orange markings broader, and the underside ground colour darker without the green suffusion. Females are smaller, and have the upperside orange markings and spots darker and more clearly defined than in Orange Palm-dart females. **Variation:** extent of underside yellow suffusion and upperside orange markings vary. **Behaviour:** males fly and perch high in the canopy near the top of the larval food plant. Probably several generations completed annually, with adults more abundant during the late wet season. **Habitat:** lowland and upland rainforest, where the larval food plant grows as a climbing vine in the canopy. **Status:** generally uncommon and local. **Larval food plant:** *Flagellaria indica*.

Southern Large Darter *Telicota anisodesma*

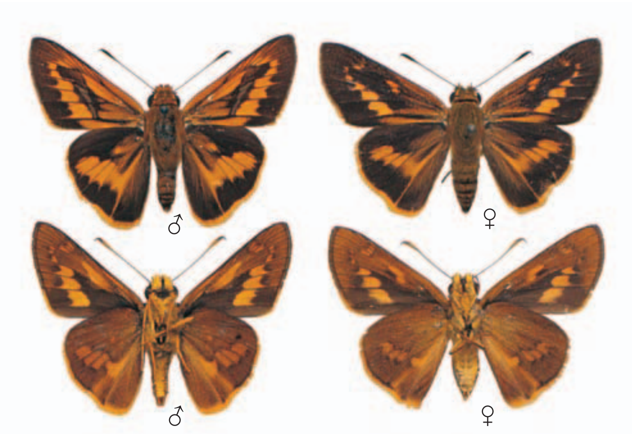


Other name: Large Darter. **Wingspan:** ♂ 31 mm, ♀ 35 mm. **Similar species:** darters, Orange Palm-dart. Southern Large Darter males have the underside ground colour dark yellow-orange often tinged with green and the outer edge of the FW upperside orange postmedian band extending narrowly along the veins to the termen compared to Northern Large Darter males; females usually have the upperside orange markings narrower, and the underside ground colour paler and suffused with dull greenish-brown. Females are smaller, and have the underside ground colour dull olive-brown or greenish-brown compared to Orange Palm-dart females. **Variation:** the FW upperside pale brownish-orange markings vary in extent in females. **Behaviour:** males fly and perch in the canopy, occasionally flying closer to ground to search for flowers. Probably several generations completed annually, with adults apparently more abundant in Nov and Feb. **Habitat:** littoral and lowland subtropical rainforest, where the larval food plant grows. **Status:** generally uncommon and local. **Larval food plant:** *Flagellaria indica*.

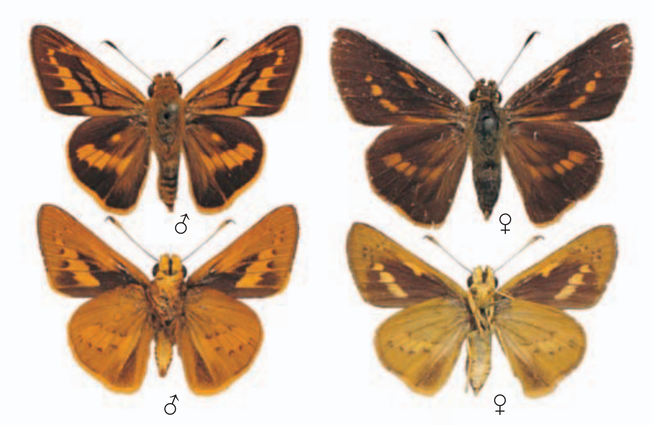
Bright-orange Darter *Telicota augias*



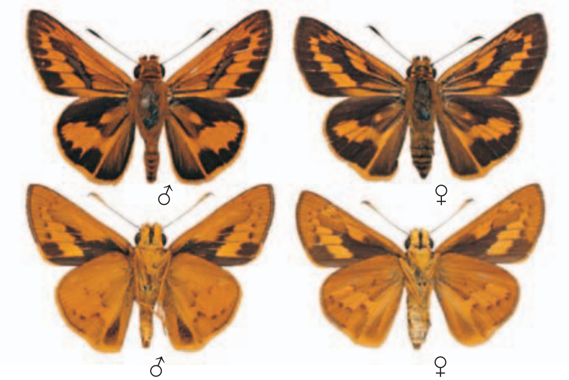
Other name: Krefft's Darter. **Wingspan:** ♂ 27 mm, ♀ 29 mm. **Similar species:** darters. Bright-orange Darter males have the upperside orange markings brighter and slightly more extensive, the spot in the HW upperside cell larger, and the HW underside postmedian band broader compared to Southern Large Darter males. They are generally smaller, have the upperside orange markings brighter and broader, the HW tornus more rounded, and the underside usually without the green suffusion compared to Greenish Darter males; females usually have the underside ground colour darker orange or yellow without the bright green suffusion. Males have the sex-brand broader and more oblique, and the HW underside postmedian band faintly edged with dark brown than in Narrow-brand Darter males. **Behaviour:** adults often fly near the ground. Probably several generations completed annually during the wet season. **Habitat:** edges of rainforest and monsoon forest, where the larval food plant grows. Adults sometimes occur outside the breeding areas in eucalypt open-forest. **Status:** common but local. **Larval food plant:** *Flagellaria indica*.



Northern Large Darter



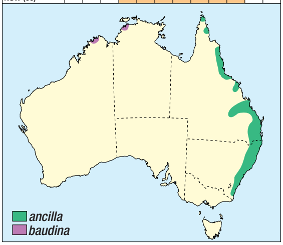
Southern Large Darter



Bright-orange Darter

Greenish Darter *Telicota ancilla*

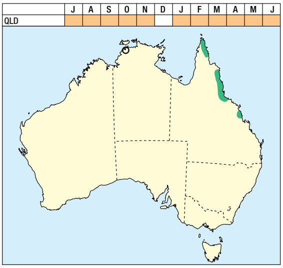
	J	A	S	O	N	D	J	F	M	A	M	J
QLD	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
NSW (cc)				🟧	🟧	🟧	🟧	🟧	🟧	🟧		



Wingspan: ♂ 29 mm, ♀ 31 mm. **Similar species:** darters. The Greenish Darter has a green suffusion on the underside, which is very pronounced and bright green in females. Males have the upperside orange markings darker and less extensive, and the sex-brand narrower than in Pale-orange Darter males; females have the upperside markings pale orange, the outer edge of the FW upperside postmedian band less extended along the veins, and the HW underside postmedian band conspicuously edged with dark brown. Males have the upperside orange markings paler, the underside ground colour paler, and the HW tornus more produced than in Bright-orange Darter males. **Variation:** two subspecies. **Behaviour:** adults fly close to the ground amongst grasses. Probably several generations completed annually. **Habitat:** eucalypt open-forest with a grassy understorey; also rainforest edge. **Status:** common but local. **Larval food plants:** usually *Imperata cylindrica* in cc. NSW; occasionally **Paspalum urvillei, *Sorghum halepense, Gahnia aspera* in QLD and *Phragmites australis* in NSW.

Narrow-brand Darter *Telicota mesoptis*

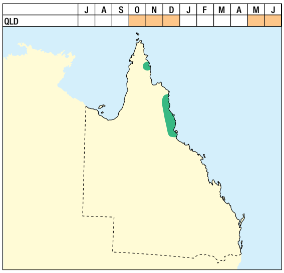
	J	A	S	O	N	D	J	F	M	A	M	J
QLD	🟧	🟧	🟧	🟧	🟧		🟧	🟧	🟧	🟧	🟧	🟧



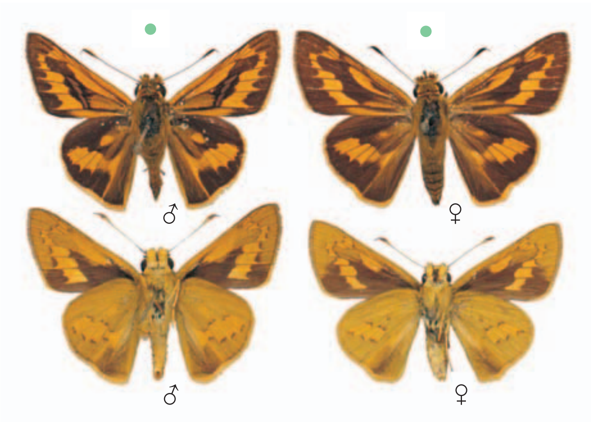
Other name: Lower's Darter. **Wingspan:** ♂ 26 mm, ♀ 26 mm. **Similar species:** darters. Narrow-brand Darter males have the sex-brand narrower and less oblique. It has the underside ground colour paler yellowish-orange or orange weakly suffused with dull green, and the HW underside postmedian band more conspicuous and usually broadly edged with dark brown than in the Small Darter. Females have the upperside orange markings less extensive than in Greenish Darter females. **Behaviour:** adults usually fly close to the ground among grasses, and may feed from flowers of *Lantana*. Possibly several generations completed annually. **Habitat:** edges of lowland tropical rainforest in the higher rainfall areas, preferring grassy areas adjoining eucalypt open-forest and riparian closed-forest. **Status:** common but local; probably extinct in NT. **Larval food plants:** Poaceae, including **Panicum maximum, * Sorghum verticilliflorum*.

Small Darter *Telicota brachydesma*

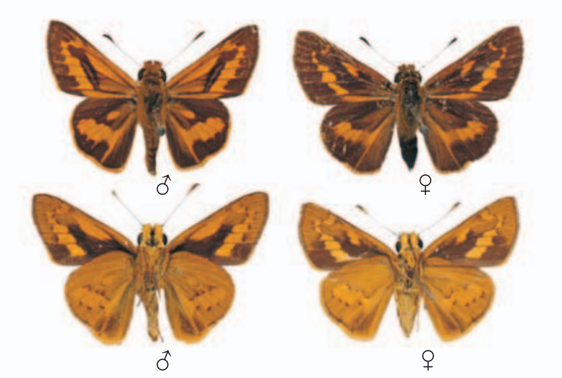
	J	A	S	O	N	D	J	F	M	A	M	J
QLD				🟧	🟧	🟧					🟧	🟧



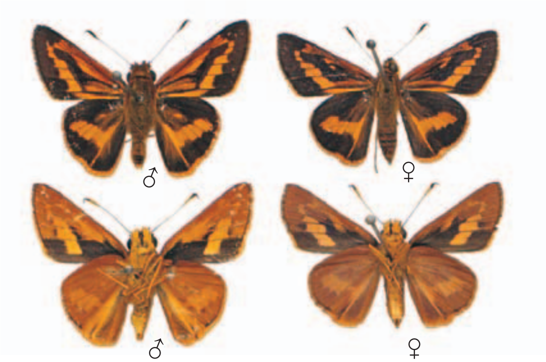
Wingspan: ♂ 26 mm, ♀ 25 mm. **Similar species:** darters. The Small Darter is smaller, and the outer edge of the FW upperside orange postmedian band does not extend along veins towards the termen. It has the underside ground colour darker orange-brown, and the HW underside postmedian band less conspicuous than in the Narrow-brand Darter. **Behaviour:** males apparently fly in the canopy of the forest. Females probably stay closer to the breeding areas. Possibly several generations completed annually, with adults recorded sporadically throughout the year. **Habitat:** tropical rainforest, where the larval food plant grows as a small tufted grass in patches on the densely shaded ground layer, often in rocky situations. Occurs at Iron Range on Cape York Peninsula and from Cooktown to Ingham in the Wet Tropics, possibly further south at Mackay, QLD. **Status:** rarely seen and very local. **Larval food plant:** *Leptaspis banksii*.



Greenish Darter

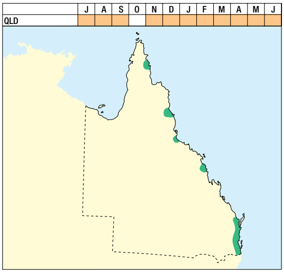


Narrow-brand Darter



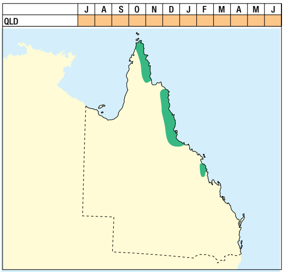
Small Darter

Swamp Darter *Arrhenes marnas*



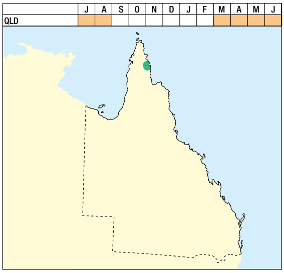
Other name: Affinis Skipper. **Wingspan:** ♂ 24 mm, ♀ 26 mm. **Similar species:** Scrub Darter. The Swamp Darter is smaller, has the FW subapical and postmedian bands broader, two conspicuous subterminal spots on the FW that are joined to the postmedian band, and the HW underside postmedian band uniform orange-yellow without brown veins and with the outer edge less distinct with obscure yellow-brown patches between the veins. **Behaviour:** adults reside within the breeding areas, flying slowly in sunlit patches close to the water amongst dense swords of the larval food plant. Number of generations completed annually not recorded; adults are abundant seasonally, being most abundant in Apr in se. QLD. **Habitat:** swampland with a sparse cover of paperbark trees in wetter lowland areas, where the larval food plant grows as a grass in the shady understorey. Occurs sporadically along the eastern coast from Iron Range to Burleigh Heads, QLD. **Status:** common but very local. **Larval food plant:** *Leersia hexandra*.

Scrub Darter *Arrhenes dschilus*

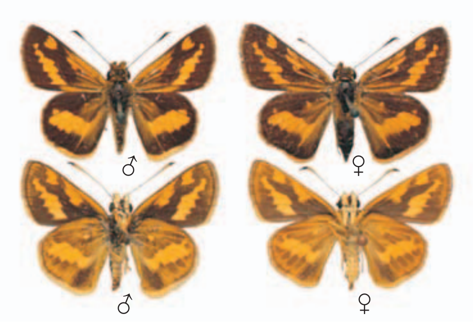


Other name: Iris Skipper. **Wingspan:** ♂ 26 mm, ♀ 29 mm. **Similar species:** Swamp Darter. The Scrub Darter is larger, usually has only one small inconspicuous subterminal spot on the FW that is separated from the postmedian band, the FW subapical and postmedian bands narrower, and the HW underside orange-yellow postmedian band faintly divided by brown veins and with the outer edge much more distinct without the obscure yellow-brown patches between the veins. **Behaviour:** adults fly near the ground amongst grasses, frequently perching on the leaves. Number of generations completed annually not recorded. **Habitat:** eucalypt open-forest and woodland adjacent to rainforest in moist coastal areas, preferring tall grassy areas. Occurs sporadically from Iron Range to near Sarina, QLD. **Status:** common but local. **Larval food plants:** *Imperata cylindrica, *Panicum maximum, *Saccharum officinarum.*

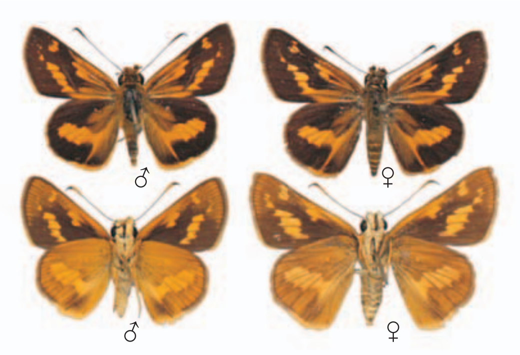
Purple Swift *Mimene atropatene*



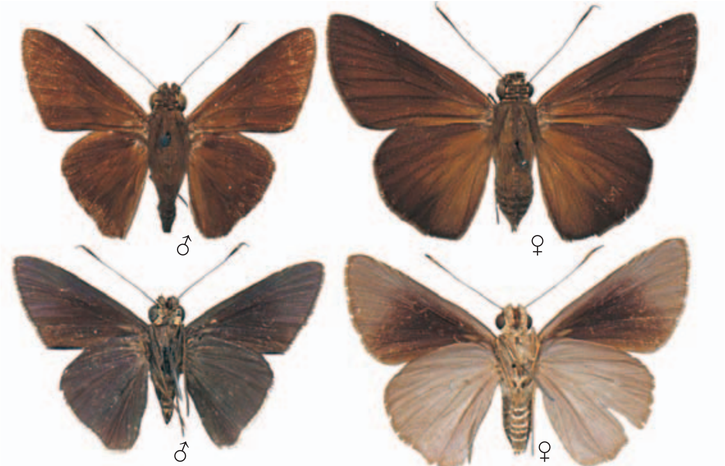
Wingspan: ♂ 36 mm, ♀ 40 mm. **Similar species:** White-fringed Swift. The Purple Swift is larger, and has a rich iridescent purple sheen on the underside; males have the FW apex more pointed, and the HW tornus more produced. **Behaviour:** adults fly close to the ground amongst grasses along forest tracks, although are more often observed feeding at flowers of *Micromelum*. Number of generations completed annually not recorded; adults are apparently more abundant during the wet season, particularly in Mar. **Habitat:** adults have been collected in tropical rainforest. **Status:** uncommon and restricted to Iron Range on Cape York Peninsula, QLD. **Larval food plant:** not recorded.



Swamp Darter

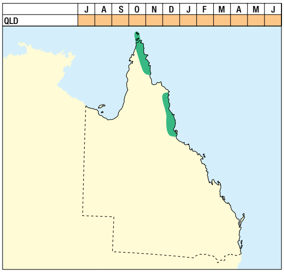


Scrub Darter



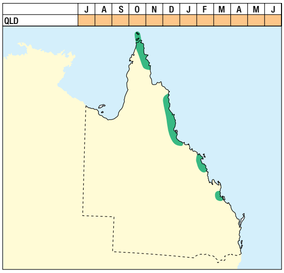
Purple Swift

White-clubbed Swift *Sabera caesina*



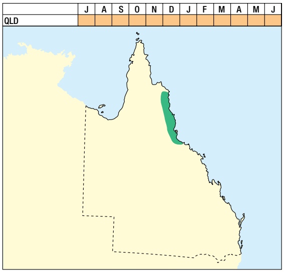
Other name: Black and White Swift. **Wingspan:** ♂ 29 mm, ♀ 31 mm. **Similar species:** none. The White-clubbed Swift has the club of the antenna white, and a purplish iridescent sheen on the upperside. **Behaviour:** adults fly very rapidly, usually close to the ground, and feed from flowers. Males bask for short periods in sunlit patches about 3 m from the ground. Probably several generations completed annually. **Habitat:** tropical rainforest, preferring the more open sunlit areas such as small natural clearings where the larval food plants grow. **Status:** common but local. **Larval food plants:** *Calamus caryotoides* on Cape York Peninsula; *Achontophoenix alexandrae, Normanbya normanbyi* in the Wet Tropics, QLD.

Yellow-streaked Swift *Sabera dobboe*

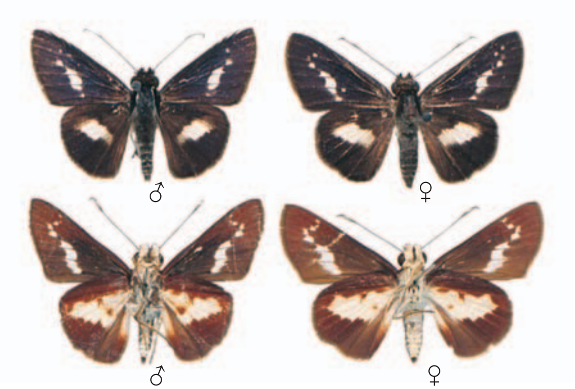


Other name: Miskin's Swift. **Wingspan:** ♂ 29 mm, ♀ 32 mm. **Similar species:** darters, Orange Palm-dart. The Yellow-streaked Swift has the upperside orange markings smaller and fewer, with the spot in the FW cell, costal streak and two subterminal spots absent. Underside ground colour dark reddish-brown, and HW underside postmedian band poorly defined compared to species of darters. **Behaviour:** adults fly in the understorey of the forest, usually in natural clearings or along tracks. Males establish territories by perching repeatedly on low shrubs in sunlit patches; they also visit hilltops. Probably several generations completed annually. **Habitat:** usually tropical rainforest; also suburban gardens provided the larval food plants are established. Occurs sporadically from the Torres Strait islands to Keppel Sands south of Yeppoon, QLD. **Status:** common but local. **Larval food plants:** *Cordyline cannifolia, C. fruticosa, C. stricta, *Cordyline australis*.

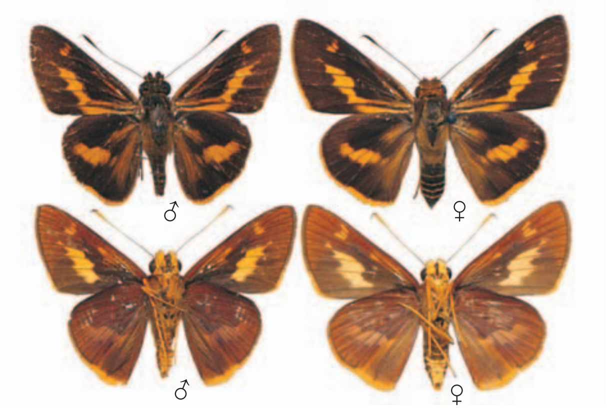
White-fringed Swift *Sabera fuliginosa*



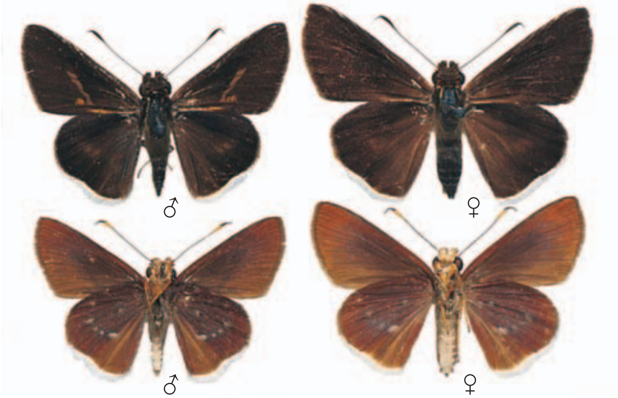
Wingspan: ♂ 31 mm, ♀ 35 mm. **Similar species:** Purple Swift, Dark Grass-skipper. The White-fringed Swift is smaller, and has the underside ground colour dark reddish-brown without a rich iridescent purple sheen compared to the Purple Swift; males have the FW apex more rounded, and the HW tornus less produced. Scale-fringe on the HW conspicuously white, and the HW tornus strongly produced compared to the Dark Grass-skipper. **Behaviour:** males fly rapidly in forest understorey, occasionally perching on leaves in sunlit patches. Probably several generations completed annually. **Habitat:** tropical rainforest, where the larval food plant grows. **Status:** uncommon, local and restricted to the Wet Tropics, QLD. **Larval food plant:** *Calamus moti*.



White-clubbed Swift

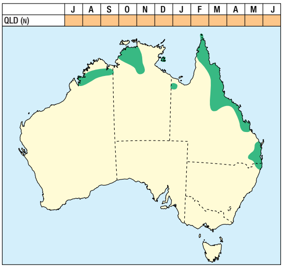


Yellow-streaked Swift



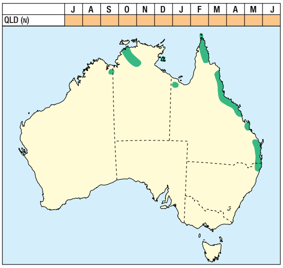
White-fringed Swift

Lyell's Swift *Pelopidas lyelli*



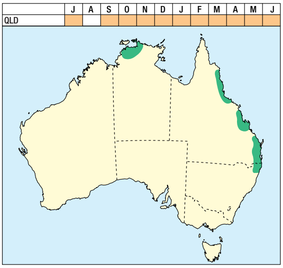
Other name: Common Swift. **Wingspan:** ♂ 32 mm, ♀ 34 mm. **Similar species:** Dingy Swift, Grey Swift, Yellow Swift, Rice Swift. Lyell's Swift has the two spots in the FW upperside cell in a different position relative to the sex-brand (males) or median spot near the dorsum (females) compared to the Dingy Swift. Females usually lack two large, conspicuous spots on the HW upperside, and have the FW central spot between veins CuA_1 and CuA_2 smaller than in the Yellow Swift. **Behaviour:** adults fly swiftly close to the ground and feed from flowers, including *Lantana*. Probably several generations completed annually. **Habitat:** wide variety of habitats, from rainforest edge to open savannah woodland, preferring areas with tall grasses. **Status:** common and widespread. **Larval food plants:** Poaceae, including **Oryza sativa*, **Panicum maximum*, **Pennisetum pedicellatum*, **Sorghum*. Native food plants not recorded.

Dingy Swift *Pelopidas agna*

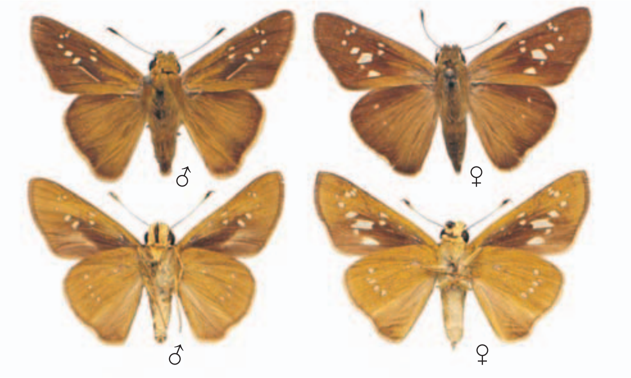


Other name: Common Swift. **Wingspan:** ♂ 33 mm, ♀ 36 mm. **Similar species:** Lyell's Swift, Grey Swift, Yellow Swift, Rice Swift. The Dingy Swift has the two spots in the FW upperside cell in a different position relative to the sex-brand (males) or median spot near the dorsum (females) compared to the Dingy Swift. Females usually lack two large, conspicuous spots on the HW upperside, and have the FW central spot between veins CuA_1 and CuA_2 smaller than in the Yellow Swift. **Behaviour:** adults fly very rapidly within about 1 m of the ground, usually in grassy areas, and feed from a wide range of flowers. Males perch on grass and low foliage within 2 m of the ground to establish territories. Probably several generations completed annually. Adults possibly migratory. **Habitat:** wide variety of habitats, including coastal paperbark woodland and eucalypt open-forest; does not extend as far inland as Lyell's Swift. **Status:** common and widespread. **Larval food plants:** *Ischaemum australe* in se. QLD; also **Oryza sativa*, **Paspalum paniculatum*, **Sorghum*.

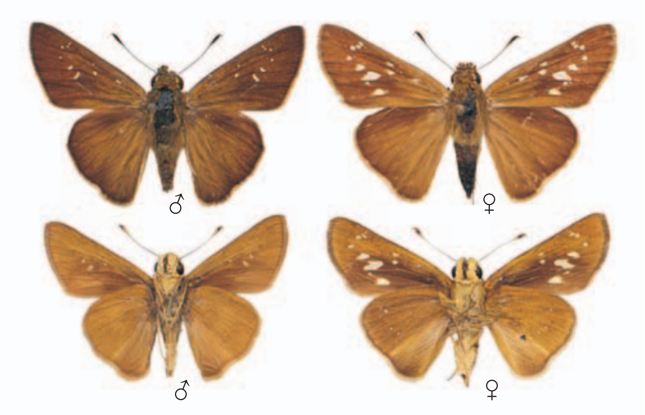
Orange Swift *Parnara amalia*



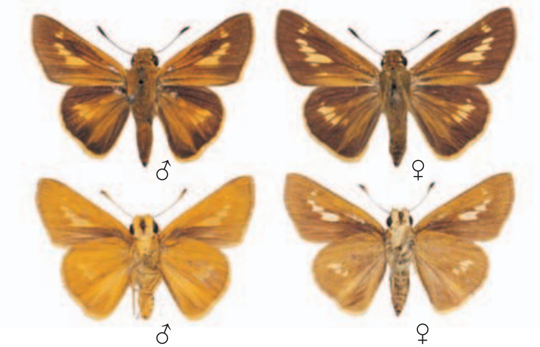
Other name: Hyaline Swift. **Wingspan:** ♂ 26 mm, ♀ 28 mm. **Similar species:** Grey Swift, Lyell's Swift, Dingy Swift. The Orange Swift has a rich orange suffusion on the upper and undersides (especially males), the FW cream spots larger, and four central spots on the HW compared to the Grey Swift. Males lack a sex-brand compared to males of the Dingy and Lyell's Swifts; females lack two spots in the FW cell. **Behaviour:** adults reside within the breeding areas, flying swiftly amongst dense swords of the larval food plant. Number of generations completed annually not recorded; adults may be very abundant during the late wet season in some years. **Habitat:** swamps along seasonal rivers, where patches of the native larval food plant grow. **Status:** common but very local. **Larval food plants:** *Leersia hexandra* in se. QLD; also **Oryza sativa*.



Lyell’s Swift

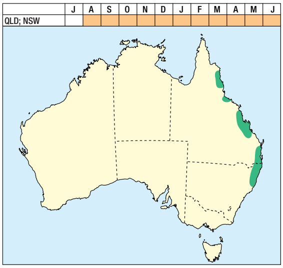


Dingy Swift



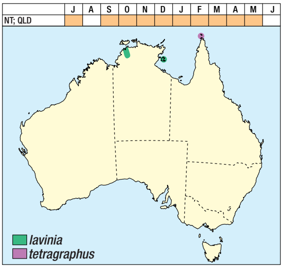
Orange Swift

Grey Swift *Parnara bada*



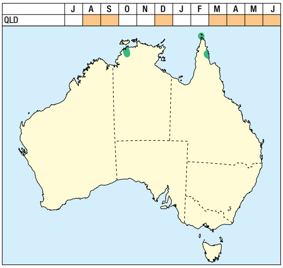
Other name: Straight Swift. **Wingspan:** ♂ 29 mm, ♀ 31 mm. **Similar species:** Orange Swift, Lyell's Swift, Dingy Swift, Rice Swift. The Grey Swift has the upper and underside ground colour grey-brown, the FW cream spots smaller, and two central spots on the HW compared to the Orange Swift. Males lack a sex-brand compared to males of the Dingy and Lyell's Swifts; females lack two spots in the FW cell. It lacks a median spot near the dorsum on the FW compared to the Rice Swift. **Behaviour:** males commonly hilltop and establish territories by perching on leaves in the upper canopy during the afternoon. Females usually observed flying near the larval food plant. Adults emerge while the pupal shelters are afloat and expand and dry their wings upwards while resting on the shelter. Number of generations completed annually not recorded. **Habitat:** swamps along creeks, seasonal riverbeds and margins of freshwater lakes, where the native larval food plant grows. Occurs sporadically from Cooktown, QLD, to Newcastle, NSW. **Status:** common but very local. **Larval food plants:** *Leersia hexandra* in se. QLD; also **Oryza sativa*.

Yellow Swift *Borbo impar*

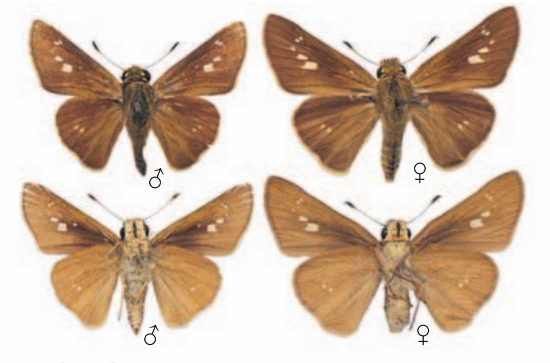


Wingspan: ♂ 35 mm, ♀ 41 mm. **Similar species:** Lyell's Swift, Dingy Swift. The Yellow Swift has the FW central spot between veins CuA$_1$ and CuA$_2$ larger, and two large, conspicuous spots on the HW upperside. **Variation:** two subspecies. **Behaviour:** adults usually fly near the larval food plant. Males perch on particular objects in open sunny areas and establish territories. Females fly more slowly and frequently settle in shady areas. Number of generations completed annually not recorded. **Habitat:** edges of tropical rainforest and savannah woodland, preferring areas where the larval food plants grow as tall grasses. **Status:** common but restricted, known only from Darwin to the Adelaide River, at Groote Eylandt, NT, and the Torres Strait islands, QLD. **Larval food plants:** *Rottboellia cochinensis* in Torres Strait; also **Panicum maximum*, **Pennisetum pedicellatum*.

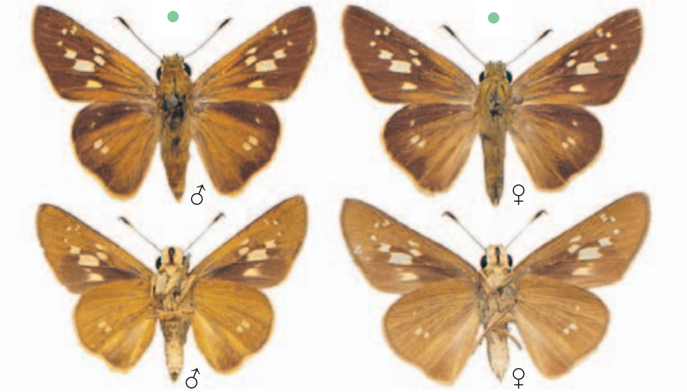
Rice Swift *Borbo cinnara*



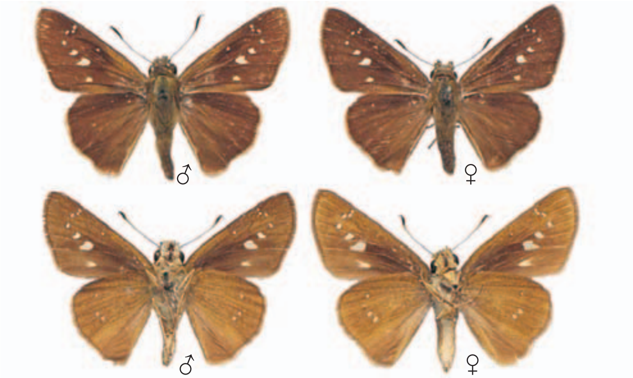
Wingspan: ♂ 32 mm, ♀ 34 mm. **Similar species:** Grey Swift, Dingy Swift, Lyell's Swift. The Rice Swift lacks two conspicuous central spots on the HW upperside compared to the Grey Swift. It is smaller than the Dingy and Lyell's Swifts; males lack a sex-brand; females lack two spots in the FW cell. **Behaviour:** adults fly swiftly low to the ground amongst grasses. Number of generations completed annually not recorded. **Habitat:** edges of tropical rainforest, preferring swampy areas where the larval food plant grows as a tall grass. **Status:** uncommon and restricted, known only from Darwin to the Adelaide River, NT, the Torres Strait islands, and Iron Range, QLD. **Larval food plant:** *Rottboellia cochinensis* in Torres Strait.



Grey Swift



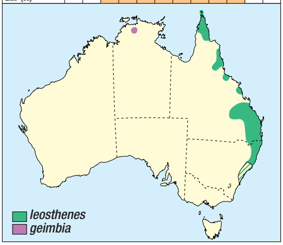
Yellow Swift



Rice Swift

Four-barred Swordtail *Protographium leosthenes*

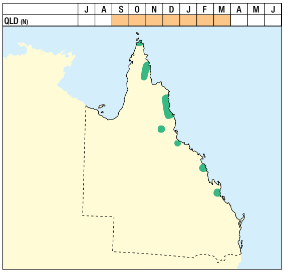
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (N)				🟧	🟧	🟧	🟧	🟧		🟧		
QLD (SE)			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		



Wingspan: ♂ 49 mm, ♀ 53 mm. **Similar species:** Five-barred Swordtail. The Four-barred Swordtail has four brown-black bands or bars on the FW, the FW termen straighter, pale orange and blue spots on the HW upperside, and the HW underside submedian markings pale orange, rather than red. **Variation:** two subspecies. **Behaviour:** adults fly within about 2 m of the ground in a relatively straight path with wings outspread. Males frequently hilltop, patrolling or gliding beneath the overstorey in open sunlit areas close to ground or among small shrubs, pausing to rest on leaves or branches with wings outspread towards the sun. Probably one generation annually in most years; the flight period and timing of adult emergence varies seasonally and usually lasts for only a few months; in some years adults may be very abundant. Adults possibly migratory, occasionally reach cc. NSW. **Habitat:** monsoon forest (vine thicket, vine forest) and subtropical rainforest, where the larval food plants grow. **Status:** common but local. **Larval food plants:** usually *Melodorum rupestrum* in NT, *M. leichhardtii* in QLD; occasionally *Desmos wardianus* in n. QLD.

Five-barred Swordtail *Graphium aristeus*

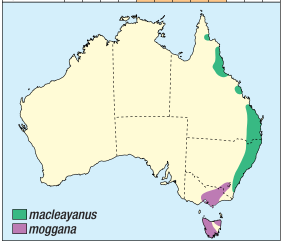
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (N)			🟧	🟧	🟧	🟧	🟧	🟧	🟧			



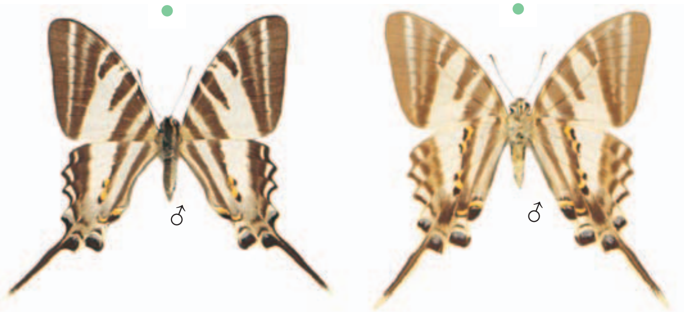
Wingspan: ♂ 48 mm, ♀ 55 mm. **Similar species:** Four-barred Swordtail. The Five-barred Swordtail has five brown-black bands or bars on the FW, the FW termen concave, and the HW underside submedian markings red, rather than pale orange. **Behaviour:** adults fly very rapidly. Males hilltop and aggressively defend territories. Females are usually observed flying around or laying eggs on the larval food plants. Probably only one generation annually in most years; the flight period varies seasonally but usually lasts for only a few weeks in summer, with most adults emerging after the first substantial wet season rains. **Habitat:** drier monsoon forests (deciduous vine thicket), where the larval food plants grow. **Status:** common but very local. **Larval food plants:** *Miliusa traceyi*, *Polyalthia nitidissima* on Cape York Peninsula; *Pseuduvaria froggattii* in the Wet Tropics, QLD.

Macleay's Swallowtail *Graphium macleayanus*

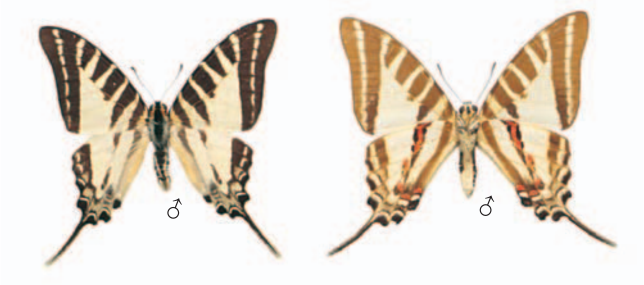
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
VIC					🟧	🟧	🟧	🟧	🟧			



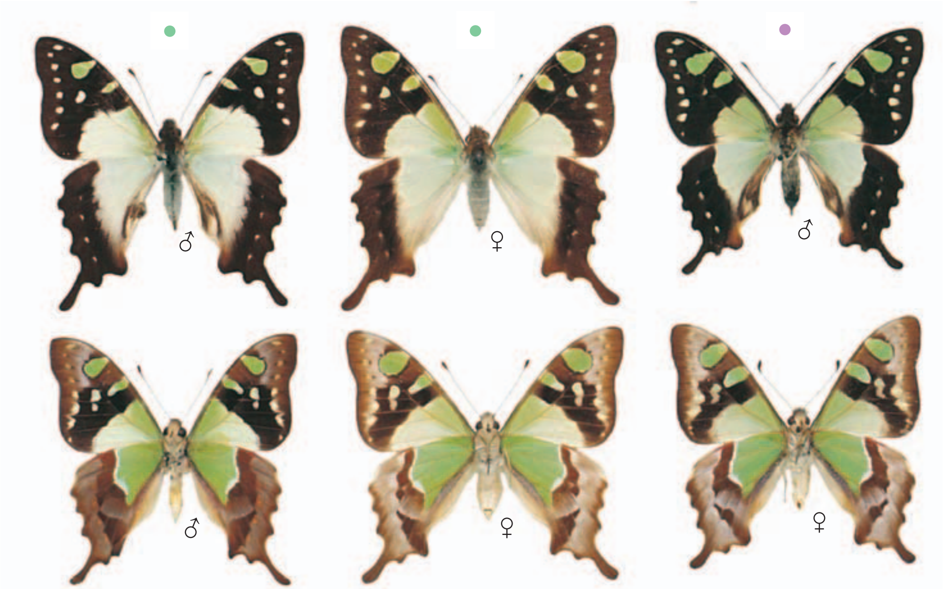
Wingspan: ♂ 53 mm, ♀ 59 mm. **Similar species:** none. Macleay's Swallowtail has tails on the HW, and a broad, rich green basal area on the underside. **Variation:** two subspecies. **Behaviour:** adults fly rapidly high up in the canopy or in sunlit glades in the understorey; they rarely settle but occasionally descend closer to ground to feed from flowers, such as *Leptospermum, Lantana, Buddleia* and daisies. Males hilltop and establish territories by gliding over a defined path. Females usually observed flying more slowly around the food plant. Two generations annually near Sydney; usually only one generation in the highlands of s. NSW, ACT, VIC and TAS, with adults emerging in Nov and Dec, followed by partial second generation in Feb–Mar. **Habitat:** upland and lowland rainforest on the coast and mountains of the Great Dividing Range in QLD and NSW; cool temperate beech forest and wet gullies in eucalypt tall open-forest in VIC and TAS, where the sassafras food plant grows; also subalpine woodland in ACT and Snowy Mountains, NSW. **Status:** common and widespread. **Larval food plants:** usually *Geijera salicifolia* in QLD and NSW, *Atherosperma moschatum* in VIC, TAS; also *Cryptocarya, Endiandra, Daphnandra, Doryphora, Tasmannia, *Cinnamomum camphora*.



Four-barred Swordtail

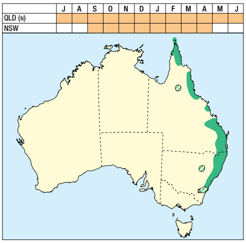


Five-barred Swordtail



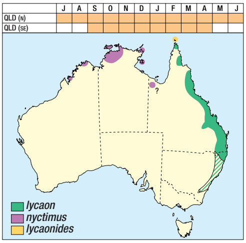
Macleay's Swallowtail

Blue Triangle *Graphium sarpedon*



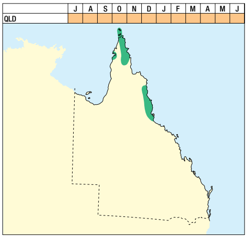
Wingspan: ♂ 57 mm, ♀ 60 mm. **Similar species:** none. The Blue Triangle has a bright turquoise-blue central band on the upperside. **Behaviour:** adults fly powerfully and erratically; they rarely stop to settle except when feeding from flowers or drinking from moist sand along banks of creeks or pools. Males hilltop and rapidly patrol the canopy. Probably two or more generations annually. **Habitat:** rainforest and monsoon forest (deciduous vine thicket) in moist lowland areas east of the Great Dividing Range, where the larval food plants grow; also suburban gardens. **Status:** common and widespread. **Larval food plants:** *Beilschmiedia, Cinnamomum, Cryptocarya, Endiandra, Litsea, Neolitsea, Doryphora, Geijera, Planchonella, Clerodendrum, *Annona reticulata, *Cinnamomum camphora.*

Pale Triangle *Graphium eurypylus*



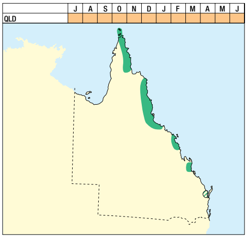
Other names: Pale Green Triangle, Pale-blue Triangle. **Wingspan:** ♂ 59 mm, ♀ 62 mm. **Similar species:** Green Triangle. The Pale Triangle has a single row of subcostal spots on the FW upperside, and a single row of subterminal spots on the HW upperside. **Variation:** three subspecies. **Behaviour:** adults fly rapidly high amongst the canopy, occasionally descending to feed from flowers. Males hilltop. Probably two or more generations annually in QLD. Migratory and infrequent visitor to cc. NSW. **Habitat:** monsoon forest in n. WA and NT; edges of rainforest and drier monsoon forests (deciduous vine thicket) in QLD; also suburban gardens. **Status:** common and widespread. **Larval food plants:** *Artabotrys, Desmos, Fitzalania, Melodorum, Miliusa, Polyalthia, Pseuduvaria, Uvaria, *Annona, *Magnolia.*

Green Triangle *Graphium macfarlanei*

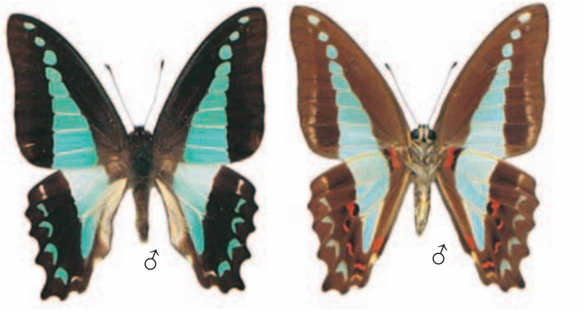


Wingspan: ♂ 64 mm, ♀ 67 mm. **Similar species:** Pale Triangle, Green-spotted Triangle. The Green Triangle has a double row of subterminal spots on the HW upperside compared to the Pale Triangle. It has the central spots on the FW upperside forming a more continuous band compared to the Green-spotted Triangle. **Behaviour:** adults fly very rapidly, pausing briefly to feed from flowers. Number of generations completed annually not recorded; adults may be abundant seasonally. **Habitat:** lowland tropical rainforest in moist coastal areas. **Status:** common but local on Cape York Peninsula; rare in the Wet Tropics, QLD. **Larval food plants:** *Desmos* in the Wet Tropics; also **Annona muricata, *Rollina deliciosa*; possibly *Xylopia* on Cape York Peninsula.

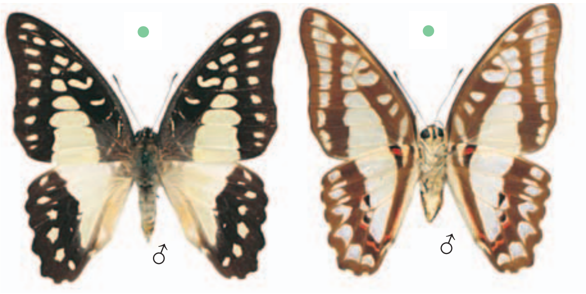
Green-spotted Triangle *Graphium agamemnon*



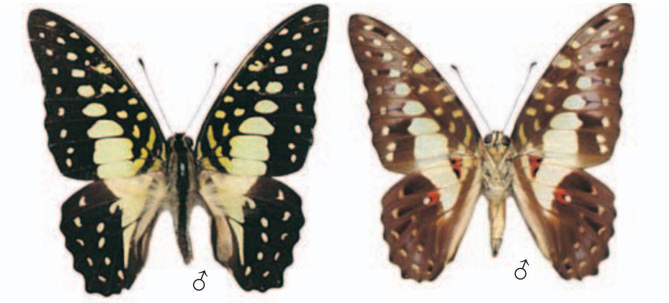
Wingspan: ♂ 62 mm, ♀ 65 mm. **Similar species:** Green Triangle. The Green-spotted Triangle has a short tail on the HW tornus. **Behaviour:** adults fly very rapidly in sunny openings such as clearings or along edges of the forest, occasionally descending from the canopy to feed from flowers, pauses momentarily at each flower with wings constantly vibrating. Probably several generations completed annually. **Habitat:** rainforest and monsoon forest (semi-evergreen vine thicket), where the larval food plants grow. **Status:** common but local. **Larval food plants:** *Cyathostemma, Desmos, Fitzalania, Goniothalamus, Haplostichanthus, Meiogyne, Melodorum, Miliusa, Polyalthia, Pseuduvaria, Uvaria, Xylopia, *Annona, *Rollina.*



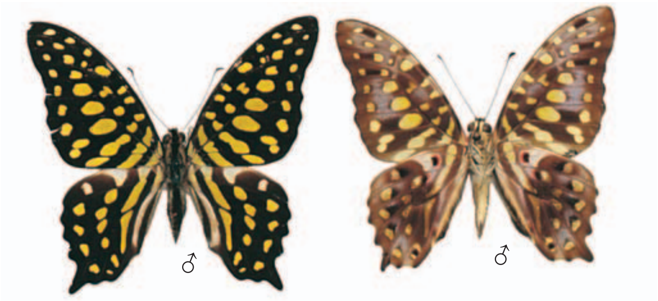
Blue Triangle



Pale Triangle

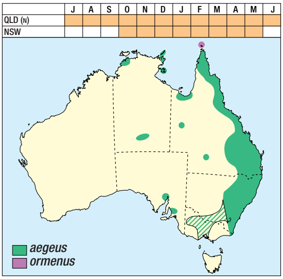


Green Triangle



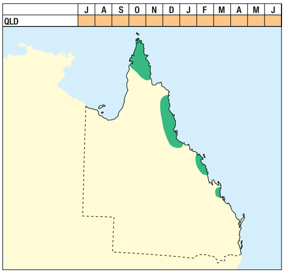
Green-spotted Triangle

Orchard Swallowtail *Papilio aegeus*

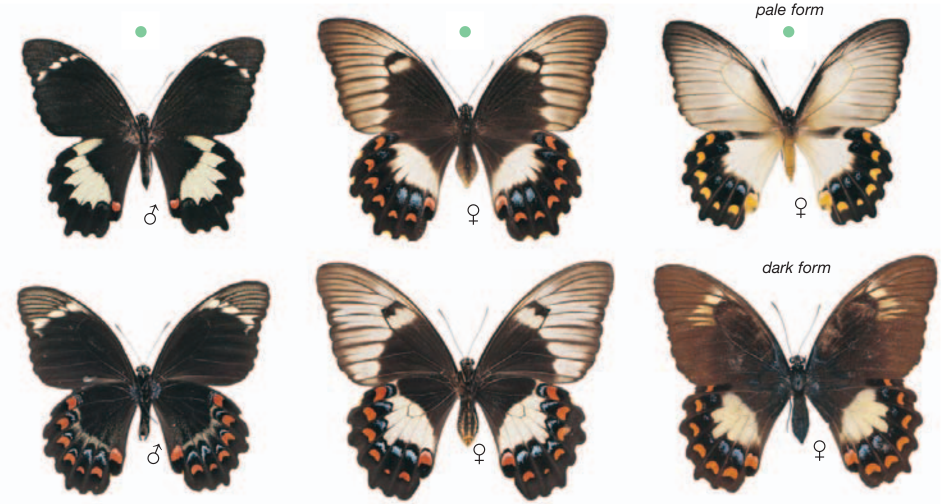


Other names: Large Citrus Butterfly, Orchard Butterfly. **Wingspan:** ♂ 102 mm, ♀ 108 mm. **Similar species:** Ambrax Swallowtail, Pearl Owl. The Orchard Swallowtail is larger, and has blue subterminal spots on the HW underside compared to the Ambrax Swallowtail. Females of the 'pale form' have the HW termen scalloped, and lack two large conspicuous eyespots on the HW underside compared to the Pearl Owl. **Variation:** two subspecies, both have three polymorphic forms among females. **Behaviour:** adults usually fly slowly and erratically, but if disturbed they fly very rapidly; when settled, the wings are held outspread. Males tend to patrol along particular flight paths. Females are often observed fluttering around the larval food plant, or feeding from flowers with wings vibrating. During courtship the male hovers above the female with rapid beating of the wings. Several generations completed annually. **Habitat:** wide variety of habitats, from moister lowland rainforests to drier eucalypt woodlands west of the Great Dividing Range; also suburban gardens and citrus orchards; has probably extended its range into VIC and SA due to planting of *Citrus*. **Status:** common and widespread. **Larval food plants:** *Citrus, Boronia, Clausena, Dinosperma, Eriostemon, Flindersia, Geijera, Halfordia, Leionema, Micromelum, Philotheca, Zanthoxylum, Zieria, *Choisya, *Citrus, *Murraya, *Poncirus, *Zanthoxylum*.

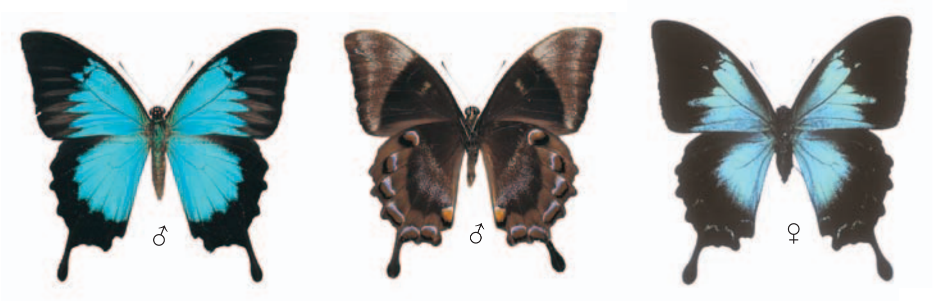
Ulysses Swallowtail *Papilio ulysses*



Other names: Ulysses Butterfly, Mountain Blue Butterfly. **Wingspan:** ♂ 106 mm, ♀ 108 mm. **Similar species:** none. The Ulysses Swallowtail has the upperside brilliant iridescent blue. **Behaviour:** adults fly in an erratic manner through the mid canopy, and often feed from flowers such as *Lantana*. Males are readily attracted to bright blue objects such as metallic foil. In flight the adults provide an impressive sight as the brilliant blue upperside is visible as a series of bright blue flashes in the sunlight, but at rest the wings remain closed exposing the cryptically patterned underside. Several generations completed annually, with adults apparently more abundant during the wet season. **Habitat:** rainforest, especially in wetter uplands where the larval food plants grow, preferring smaller trees about 2 m high or regrowth produced after trees have been felled or branches cut on which to breed; also suburban areas where the usual larval food plants have been planted. Occurs sporadically from the Torres Strait islands to Sarina and Byfield, QLD. **Status:** common and widespread. **Larval food plants:** usually *Melicope bonwickii, M. elleryana, M. rubra, M. vitiflora*; also *Flindersia bourjotiana, Geijera salicifolia, Halfordia kendack, *Citrus*.

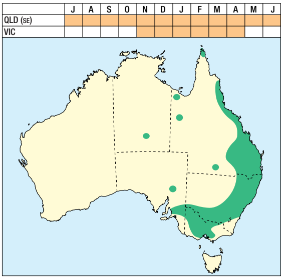


Orchard Swallowtail



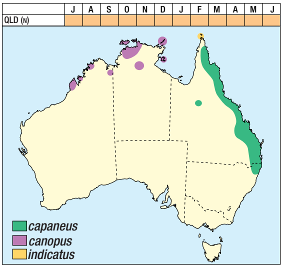
Ulysses Swallowtail

Dainty Swallowtail *Papilio anactus*



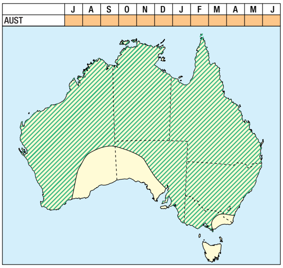
Other names: Dingy Swallowtail, Small Citrus Butterfly. **Wingspan:** ♂ 67 mm, ♀ 72 mm. **Similar species:** Clearwing Swallowtail. The Dainty Swallowtail has the FWs darker, with a series of white subterminal spots. **Behaviour:** males establish territories by patrolling in open sunny areas, gliding gracefully back and forth 1–2 m above the ground with a weak, slow and regular flight, occasionally settling on low objects with wings outspread; if disturbed or approached by rival males they may fly at great speed in a fast, erratic manner; also commonly hilltop. Several generations completed annually. **Habitat:** eucalypt open-forest and woodland; also suburban gardens; has probably extended its range into s. VIC and SA due to planting of *Citrus*. **Status:** common and widespread. **Larval food plants:** *Citrus australasica, C. australis, C. garrawayae, C. glauca, C. inodora, *Citrus, Geijera parviflora, *Limonia acidissima, *Poncirus trifoliata.*

Fuscous Swallowtail *Papilio fuscus*

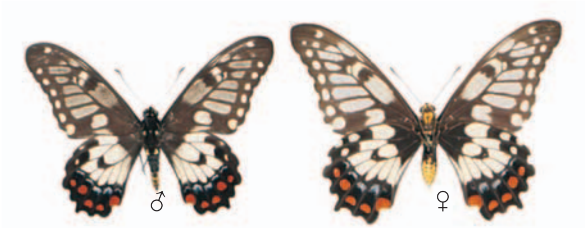


Other names: Northern Citrus Butterfly, Capaneus Butterfly, Canopus Butterfly. **Wingspan:** ♂ 85 mm, ♀ 91 mm. **Similar species:** none. The Fuscous Swallowtail has a conspicuous tail on the HW. **Variation:** three subspecies. **Behaviour:** adults usually fly slowly and erratically, but if disturbed fly very rapidly. Probably several generations completed annually, with adults generally more abundant in the warmer months during the wet season; adult emergence is very seasonal and depends on timing of first significant rainfall at end of the dry season, but in some years adults are absent. **Habitat:** drier rainforests and monsoon forests (vine forest and deciduous vine thicket), mainly in coastal and subcoastal lowlands where the native food plants grow. **Status:** common, especially during good wet seasons, but local. **Larval food plants:** *Bosistoa, Citrus, Clausena, Geijera, Glycosmis, Halfordia, Micromelum, Murraya, Zanthoxylum, *Citrus, *Murraya, *Zanthoxylum*.

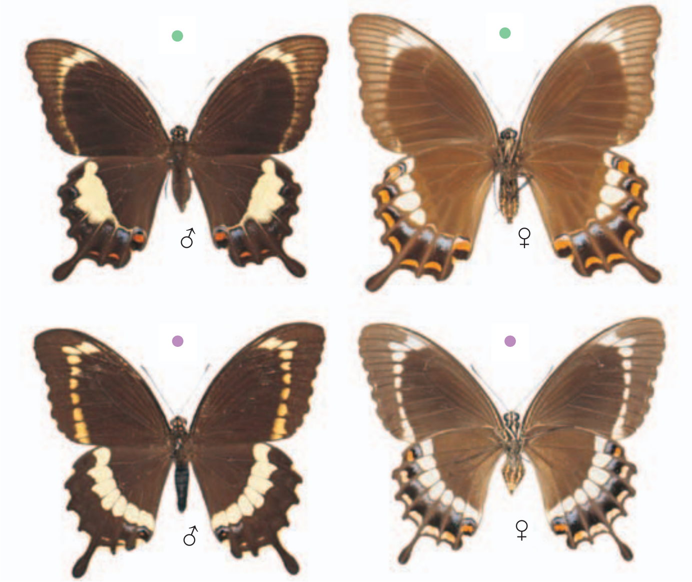
Chequered Swallowtail *Papilio demoleus*



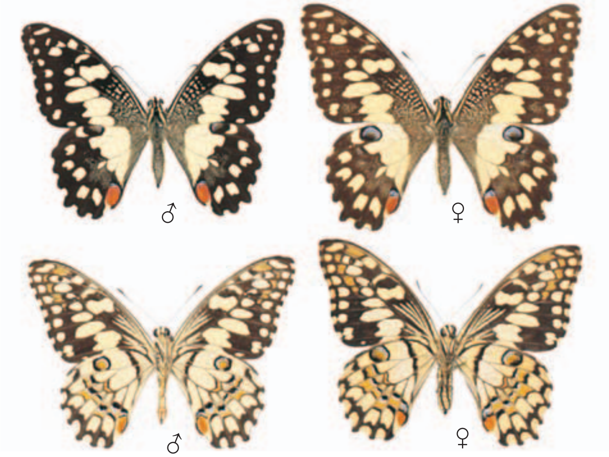
Wingspan: ♂ 72 mm, ♀ 75 mm. **Similar species:** none. The Chequered Swallowtail has an extensive series of pale yellow spots and markings. **Behaviour:** adults fly very rapidly, usually within 1–2 m of the ground; they often settle at margins of puddles to drink from moist sand, or may be observed feeding from flowers or fluttering slowly near the larval food plants. Probably several generations completed annually. Adults are migratory, and populations move and fluctuate according to local climatic conditions; during favourable seasons species expands its range temporarily from the inland to the coast. **Habitat:** usually dry arid and semi-arid habitats in inland areas, preferring moister areas such as along creeks and rivers or near billabongs where the usual larval food plants grow as low-growing shrubby perennial legumes. **Status:** very common and widespread. **Larval food plants:** usually *Cullen*; occasionally *Citrus australis, *Citrus aurantium, *Citrus aurantifolia, *Psoralea pinnata*.



Dainty Swallowtail

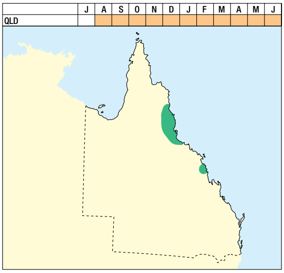


Fuscous Swallowtail



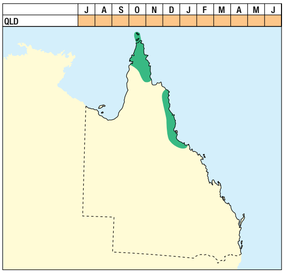
Chequered Swallowtail

Ambrax Swallowtail *Papilio ambrax*



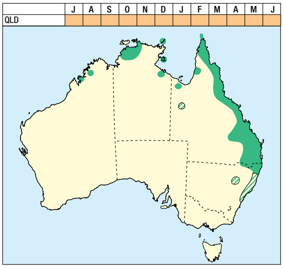
Other name: Ambrax Butterfly. **Wingspan:** ♂ 80 mm, ♀ 84 mm. **Similar species:** Orchard Swallowtail, Red-bodied Swallowtail. The Ambrax Swallowtail is smaller, and the HW underside lacks blue subterminal spots compared to the Orchard Swallowtail. Females have the abdomen black, and the HW underside subterminal spots orange-red, rather than pink as in the Red-bodied Swallowtail. **Behaviour:** adults fly slowly and erratically, usually along the edges or in clearings of the forest. Several generations completed annually, with adults more seasonal in the drier areas, flying mainly during the wet season. **Habitat:** tropical rainforest in wet coastal lowland and upland areas, where the native larval food plants grow. Occurs in the Wet Tropics and at Mackay, QLD. **Status:** generally uncommon and local. **Larval food plants:** *Citrus, Clausena, Zanthoxylum, *Citrus, *Limonia, *Murraya, *Zanthoxylum.*

Red-bodied Swallowtail *Pachliopta polydorus*

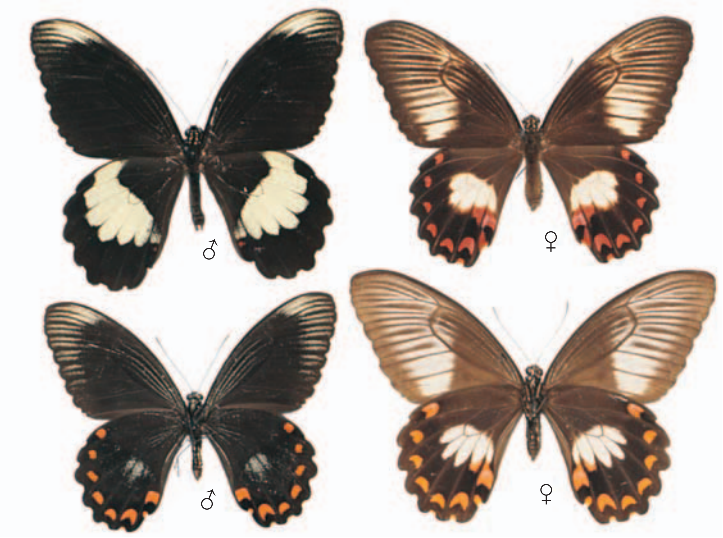


Wingspan: ♂ 72 mm, ♀ 76 mm. **Similar species:** Ambrax Swallowtail. The Red-bodied Swallowtail has the posterior end of the abdomen red, and the HW underside subterminal spots pink, rather than orange-red, compared to Ambrax Swallowtail females. **Behaviour:** adults fly slowly amongst the undergrowth, usually within several metres of the ground, and feed from flowers such as *Lantana*. Probably several generations completed annually, with adults apparently more abundant during the wet season. **Habitat:** edges of tropical rainforest and monsoon forest (vine thicket), where the larval food plants grow as vines. Occurs from the Torres Strait islands to Coen and from Mt Webb near Cooktown to Cromarty near Townsville, QLD. **Status:** generally uncommon and local. **Larval food plants:** *Aristolochia acuminata, A. chalmersii, A. thozetii, Pararistolochia australopithecurus, P. deltantha, P. linearifolia, P. peninsulensis.*

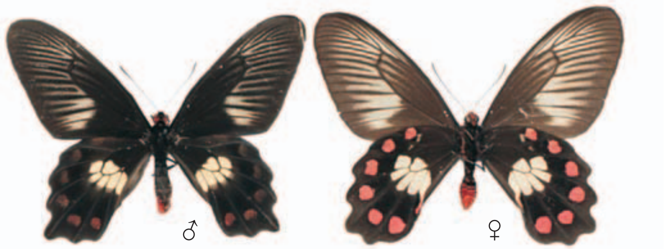
Clearwing Swallowtail *Cressida cressida*



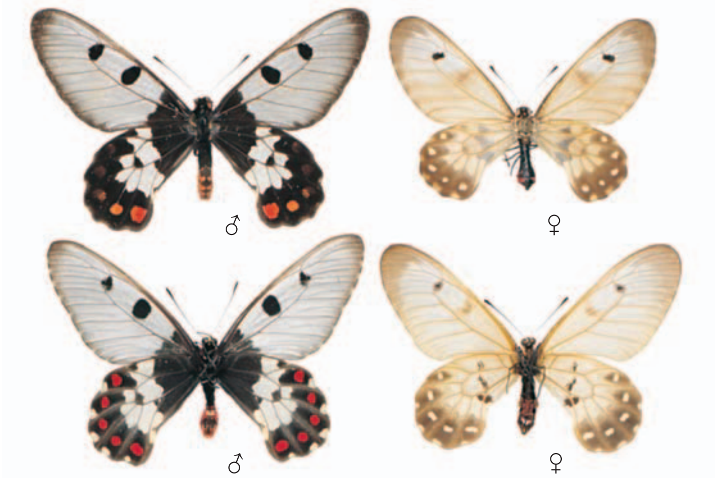
Other names: Greasy Swallowtail, Big Greasy. **Wingspan:** ♂ 80 mm, ♀ 70 mm. **Similar species:** Dainty Swallowtail, Glasswing. Clearwing Swallowtail males have the FWs paler, more transparent with two conspicuous black spots in the cell, not present in the Dainty Swallowtail. They are larger, and have red subterminal spots on the HW compared to the Glasswing. **Variation:** extent of HW underside terminal band, and colour of HW basal area vary geographically in females. **Behaviour:** adults fly relatively slowly and less erratically than other swallowtails, but if disturbed may fly rapidly. Males frequently patrol the breeding areas in search of females. Females usually fly closer to the ground searching for suitable larval food plants. Probably several generations completed annually, with adults apparently being more abundant during the wet season. Occasional vagrant specimens reach inland areas of QLD and NSW. **Habitat:** wide variety of habitats, but usually eucalypt open-forest and savannah woodland in coastal and subcoastal areas in the tropics and subtropics, where the larval food plants grow as vines close to the ground. **Status:** common and widespread. **Larval food plants:** usually leaves of *Aristolochia acuminata, A. chalmersii, A. holtzei, A. pubera, A. thozetii, Aristolochia* sp. aff. *pubera, Pararistolochia praevenosa*; also flowers of **Aristolochia elegans.*



Ambrax Swallowtail

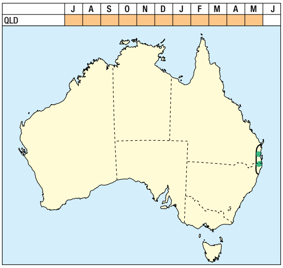


Red-bodied Swallowtail



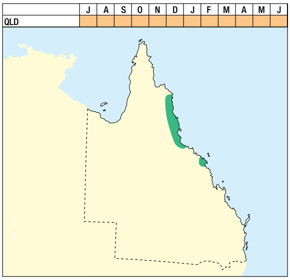
Clearwing Swallowtail

Richmond Birdwing *Ornithoptera richmondia*



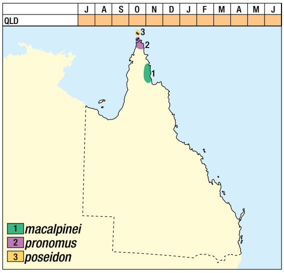
Wingspan: ♂ 105 mm, ♀ 115 mm. **Similar species:** Cairns Birdwing, New Guinea Birdwing. The Richmond Birdwing is smaller. Males have the FW upperside green submarginal band less extensive, particularly along the dorsum. **Behaviour:** adults have a gliding or sailing flight; they fly throughout the day, but are more active during the early morning and late afternoon; they readily feed from brightly coloured flowers. Males often fly near the tops of the tallest trees. Two or more generations annually in lowland areas, with adults most abundant during Sep–Nov and Feb–Apr; one generation in montane areas, with adults flying from Nov to Feb. Populations temporary in montane areas. **Habitat:** subtropical rainforest, littoral rainforest and gallery forest in lowland and upland areas, mainly on volcanic soils where the larval food plants grow as vines. **Status:** common but local and restricted. **Larval food plants:** *Pararistolochia praevenosa* in lowland areas below 600 m; *P. laheyana* in montane areas above 800 m.

Cairns Birdwing *Ornithoptera euphorion*

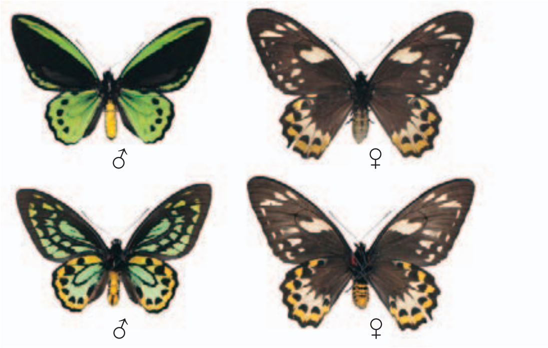


Other names: Cooktown Birdwing, Northern Birdwing. **Wingspan:** ♂ 125 mm, ♀ 150 mm. **Similar species:** Richmond Birdwing, New Guinea Birdwing. Cairns Birdwing males have the FW upperside green submarginal band less extensive, the HW upperside black termen broader, the HW termen scalloped, and the FW underside blue-green spots and markings less extensive compared to New Guinea Birdwing males. **Behaviour:** adults fly with a gliding or sailing flight; they fly throughout the day, but are more active during the early morning and late afternoon. Males often fly near the tops of the tallest trees. Several generations completed annually, with adults occurring throughout the year. Populations semi-resident in montane areas of the Atherton Tableland, QLD. **Habitat:** rainforest in both lowland and upland areas, where the larval food plants grow as large vines; also suburban parks and gardens where the food plants have been established. Adults occasionally fly in eucalypt open-forest but do not breed in these habitats. **Status:** common but local and restricted to the Wet Tropics and the Mackay district, QLD. **Larval food plants:** usually leaves of *Aristolochia acuminata, A. indica, A. pubera, A. thozetii, Pararistolochia australopithecurus, P. deltantha, P. sparusifolia*; also flowers of **Aristolochia elegans*.

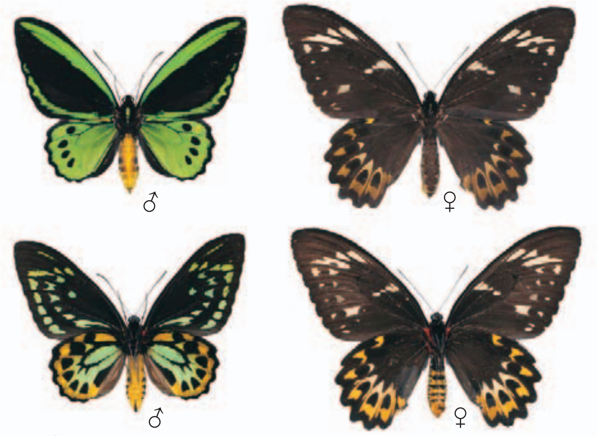
New Guinea Birdwing *Ornithoptera priamus*



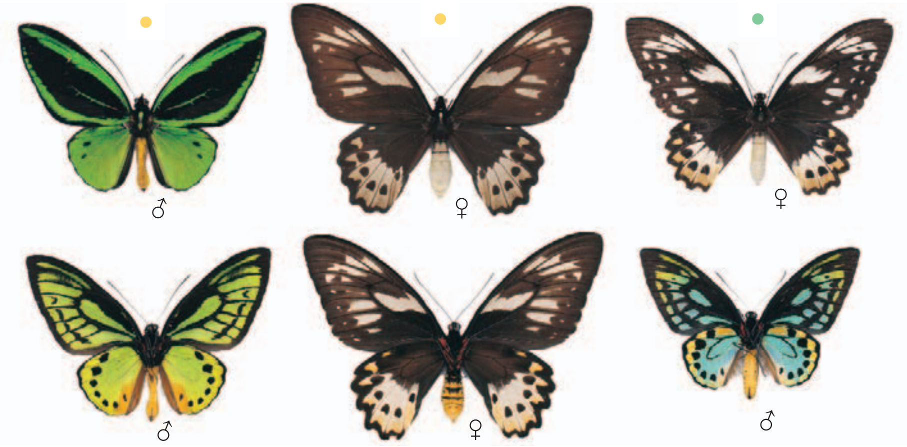
Other names: Cape York Birdwing, Priam's Birdwing, Northern Birdwing. **Wingspan:** ♂ 125 mm, ♀ 150 mm. **Similar species:** Cairns Birdwing, Richmond Birdwing. New Guinea Birdwing males have a pronounced green central streak along the FW upperside cell, the FW upperside green submarginal band more extensive, particularly along the dorsum, the HW upperside black termen narrower, and the FW underside blue-green spots and markings more extensive compared to Cairns Birdwing males. It is larger than the Richmond Birdwing. **Variation:** three subspecies. **Behaviour:** adults fly with a gliding or sailing flight. Several generations completed annually, with adults occurring throughout the year. **Habitat:** lowland tropical rainforest, where the usual larval food plant grows as a large vine. **Status:** uncommon, local and restricted to the Torres Strait islands and northern Cape York Peninsula, QLD. **Larval food plants:** usually *Aristolochia acuminata*; sometimes *A. chalmersii*.



Richmond Birdwing

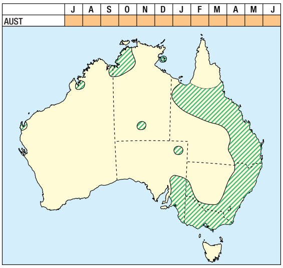


Cairns Birdwing



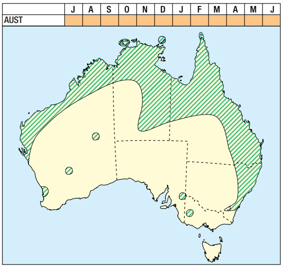
New Guinea Birdwing

White Migrant *Catopsilia pyranthe*

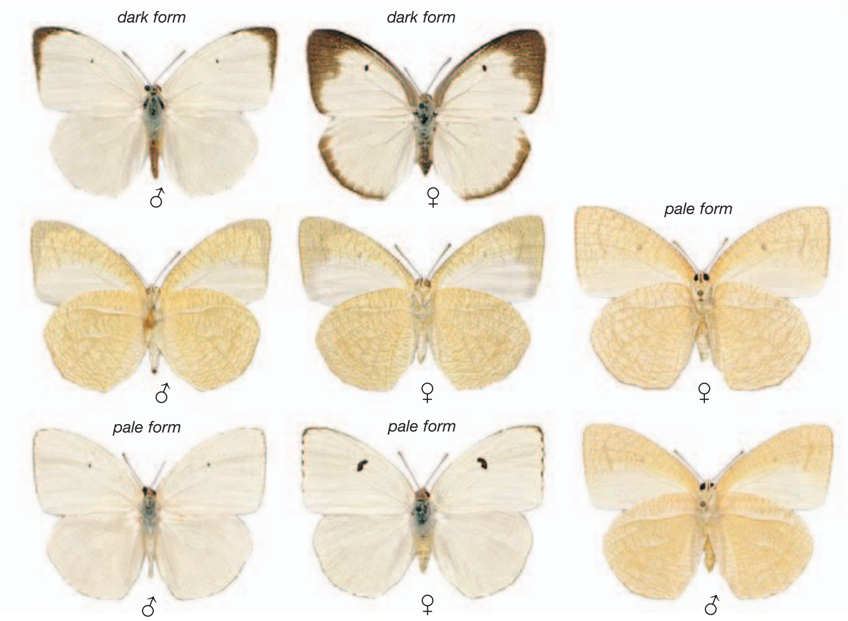


Other name: Common Migrant. **Wingspan:** ♂ 53 mm, ♀ 53 mm. **Similar species:** Lemon Migrant, Orange Migrant, Yellow Migrant. The White Migrant has conspicuous pale brown striations on the underside compared to other migrants. **Variation:** two polymorphic forms. **Behaviour:** adults fly rapidly. They occur throughout the year but are very seasonal, being abundant only between Jan and May; they breed for only a few months during this period, but it is not known how and where the species survives the winter or dry season when the immature stages are killed by frosts and the larval food plants frequently die back. Adults migrate irregularly, however, the precise nature of population movements and overall breeding patterns across the distributional range are not understood. In QLD, large southerly migrations occur periodically, sometimes reaching as far south as Sydney; very occasionally a few adults reach ACT, c. and e. VIC, and se. SA but do not breed in these temperate areas. At Sydney, and in areas further south, the migrations last for several weeks between Mar and May. **Habitat:** wide variety of habitats, mainly in tropical and subtropical zones, especially the drier inland areas. **Status:** very common and widespread. **Larval food plants:** *Cassia brewsteri, Senna aciphylla, S. alata, S. barclayana, S. planitiicola, S. venusta, *Cassia fistula, *Senna didymobotrya.*

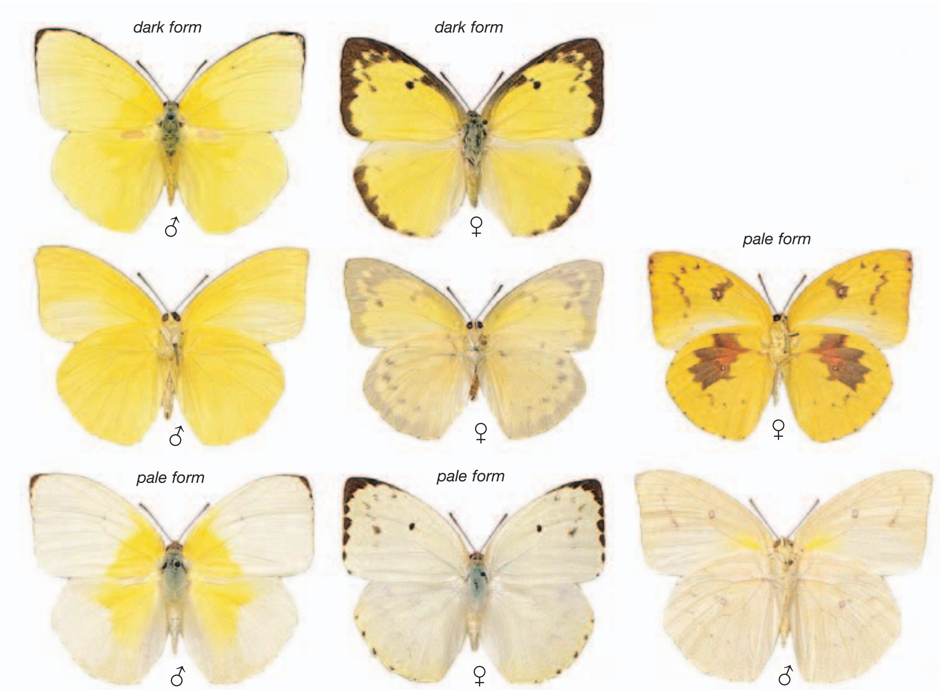
Lemon migrant *Catopsilia pomona*



Other name: Cassia Butterfly. **Wingspan:** ♂ 58 mm, ♀ 58 mm. **Similar species:** White Migrant, Orange Migrant, Yellow Migrant. Both forms of the Lemon Migrant have the upperside colour of both wings uniformly yellow or white compared to the Orange and Yellow Migrants. Females of the 'pale form' have two silver spots encircled with a reddish-pink ring at the end of the HW underside cell, rather than one or two dull reddish-brown spots found in females of the Orange and Yellow Migrants. **Variation:** two seasonal forms, with intermediate forms. **Behaviour:** adults fly rapidly, and readily feed from flowers. They occur throughout the year but are seasonal, breeding only during the wet season; during the dry season they remain reproductively dormant. They regularly migrate during sunshine, flying steadily from between 2–7 m above the ground, reaching their greatest densities between mid morning and early afternoon. The migrations, which usually comprise 'dark forms', generally last for only one or two weeks during summer. In ne. QLD, immense northerly or north-westerly flights have been observed. In se. QLD, southerly or south-easterly migrations have been recorded and, in some years, these flights appear to continue into cc. NSW and areas further south-west where the species does not breed. **Habitat:** wide variety of habitats, mainly in tropical areas. **Status:** very common and widespread. **Larval food plants:** *Cassia, Senna, *Cassia fistula, *Senna didymobotrya, *S. siamea.*

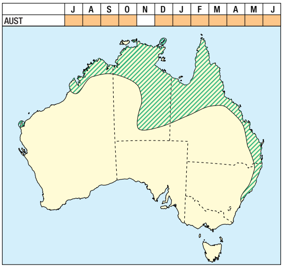


White Migrant



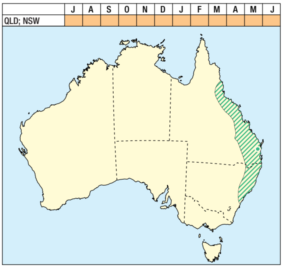
Lemon Migrant

Orange Migrant *Catopsilia scylla*



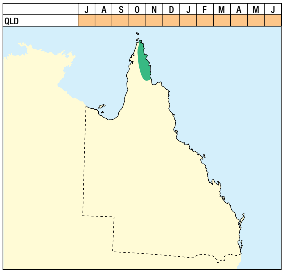
Wingspan: ♂ 54 mm, ♀ 54 mm. **Similar species:** Yellow Migrant, Lemon Migrant, White Migrant. The Orange Migrant has the HW upperside orange, rather than yellow, the FW upperside black apical and terminal band broader and longer, and the FW upperside cell without a black spot compared to the Yellow Migrant. The upperside of the wings are contrasted in white or cream (FW) and orange (HW), whereas in the Lemon and White Migrants the wings are uniform in colour. **Variation:** two polymorphic forms; 'pale form' rare, known only in females. **Behaviour:** adults fly very rapidly. They occur throughout the year but are very seasonal, being more abundant during the wet season when they breed from about Jan to Apr. Adults are migratory, but patterns of population movement are not understood; at most localities adults appear for a few months during the breeding season but the populations are temporary. **Habitat:** wide variety of habitats, mainly in dry tropical areas. **Status:** generally common but local. **Larval food plants:** *Senna leptoclada* in WA; *S. retusa, *Senna surattensis* in ne. QLD; probably *S. oligoclada* in NT.

Yellow Migrant *Catopsilia gorgophone*

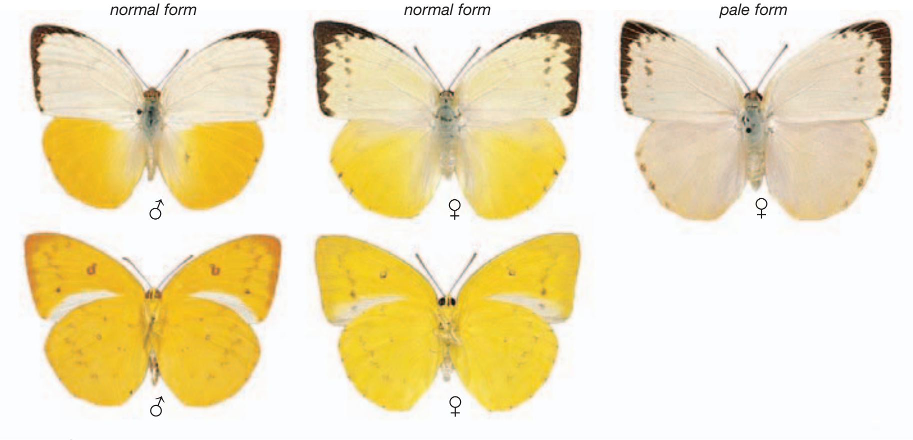


Wingspan: ♂ 56 mm, ♀ 56 mm. **Similar species:** Orange Migrant, Lemon Migrant, White Migrant. The Yellow Migrant has the HW upperside yellow rather than orange, the FW upperside black apical and terminal bands narrower and shorter, a black spot in the FW upperside cell, and the apex and tornus of the FW more rounded compared to the Orange Migrant. The upperside of the wings are contrasted in white or cream (FW) and yellow (HW), whereas in the Lemon and White Migrants the wings are uniform in colour. **Variation:** two polymorphic forms; 'pale form' rare. **Behaviour:** adults occur throughout the year but breed seasonally, usually in late summer and autumn, being most abundant in March and April. They appear to be migratory; at most localities adults do not arrive until autumn, but the populations are temporary. However, in some suburban areas near Brisbane adults are resident; during winter they are seen only during the warmer parts of the day. Vagrants occasionally reach Sydney and the Atherton Tableland, QLD. **Habitat:** wide variety of habitats, mainly in subtropical areas of se. QLD and ne. NSW north of the Richmond River. **Status:** generally common but local. **Larval food plants:** *Senna acclinis, S. retusa, *Senna surattensis, *S. auriculata.*

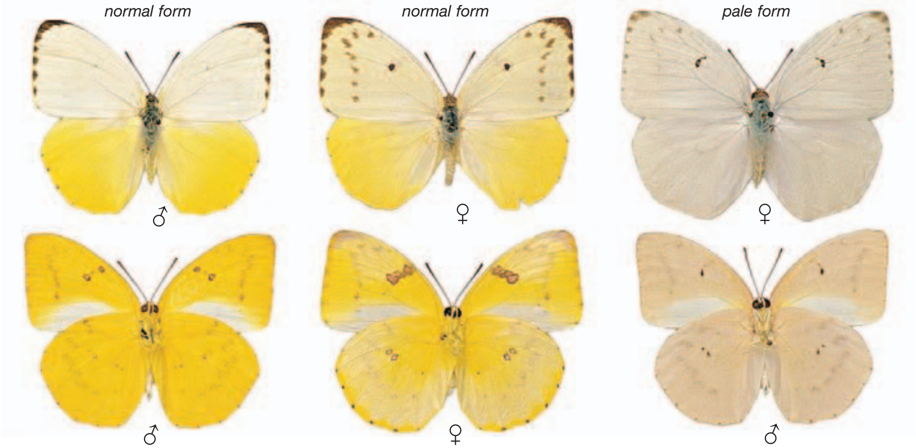
Broad-margined Grass-yellow *Eurema puella*



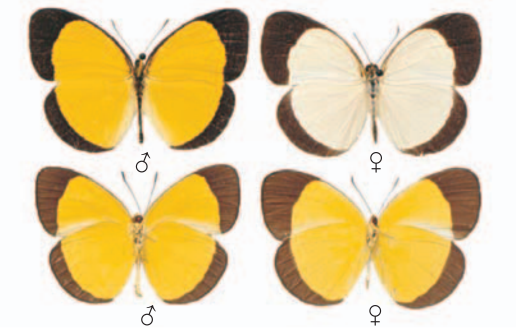
Wingspan: ♂ 35 mm, ♀ 35 mm. **Similar species:** none. The Broad-margined Grass-yellow has the black terminal band on each wing very broad. **Behaviour:** adults fly slowly or perch 1–2 m above the ground in sunlit patches in the understorey of the forest; they also fly along the margins and tracks within the forest. In flight the rich yellow upperside of the males makes them conspicuous, however, females are less easily seen as they flit from patches of sunlight to shade. Probably several generations completed annually. **Habitat:** lowland tropical rainforest, where the larval food plants grow. **Status:** common but local. **Larval food plants:** *Archidendron hirsutum, Ventilago ecorollata.*



Orange Migrant

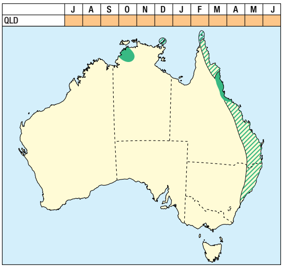


Yellow Migrant



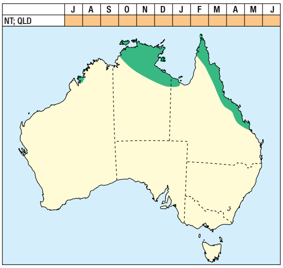
Broad-margined Grass-yellow

No-brand Grass-yellow *Eurema brigitta*



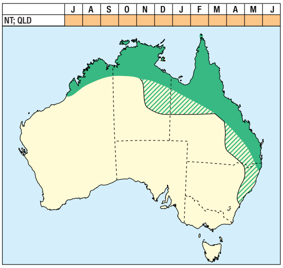
Wingspan: ♂ 33 mm, ♀ 36 mm. **Similar species:** Lined Grass-yellow, Pink Grass-yellow, Small Grass-yellow. No-brand Grass-yellow 'wet-season forms' have the HW upperside black terminal band broader, faint yellow streaks on the FW upperside apex, and obscure dark grey markings on the HW underside. 'Dry-season forms' have the scale-fringe pinkish-orange. **Variation:** two seasonal forms. **Behaviour:** adults fly slowly close to the ground. Several generations completed annually, with adults most abundant during the autumn-winter period depending upon timing of the wet season. Populations are resident in the Wet Tropics, QLD, where breeding occurs throughout the year; elsewhere adults migrate opportunistically depending on availability of larval food, moving temporarily southwards during summer and retreating northwards the following winter. In drier areas with more seasonal rainfall, the larval food plants dry up and eventually die as the dry season progresses. **Habitat:** grassland and savannah woodland with a grassy understorey, particularly in lowland areas where the larval food plants grow as small herbs. **Status:** common and widespread. **Larval food plants:** *Chamaecrista nomame* in se. QLD and n. NSW; *Neptunia dimorphantha* in ne. QLD.

Lined Grass-yellow *Eurema laeta*

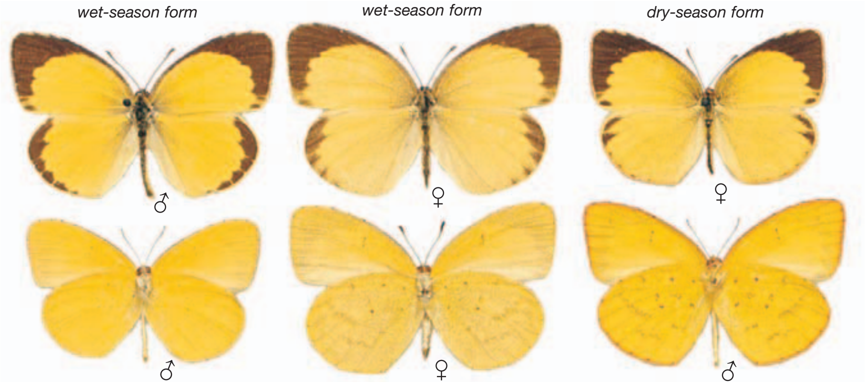


Other name: Spotless Grass-yellow. **Wingspan:** ♂ 30 mm, ♀ 29 mm. **Similar species:** No-brand Grass-yellow, Pink Grass-yellow, Small Grass-yellow. Lined Grass-yellow 'wet-season forms' have the HW upperside black terminal band narrower and unbroken, and lack markings on the underside. 'Dry-season forms' have the HW underside ground colour brown or pinkish-brown, with two straight dark streaks. **Variation:** two seasonal forms, with intermediate forms in April–May. **Behaviour:** adults fly slowly close to the ground and do not migrate. Several generations completed annually. Breeding is seasonal and opportunistic, depending upon rainfall; during the dry season, when the larval food plant dries off and loses its leaves, females ('dry-season form') stop reproducing and aggregate in moist refugia, such as creek beds and other shaded areas. **Habitat:** grassland and savannah woodland with a grassy understorey, where the food plant grows as a small herb. **Status:** common and widespread. **Larval food plant:** *Chamaecrista*.

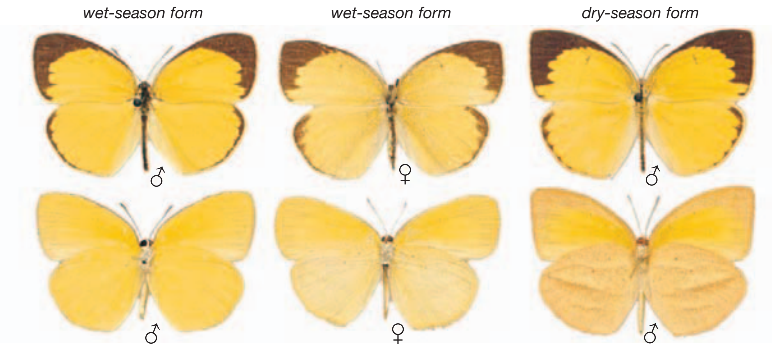
Pink Grass-yellow *Eurema herla*



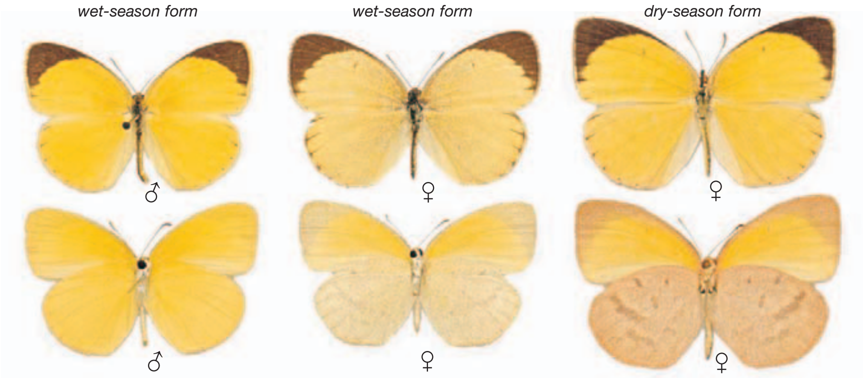
Other name: Macleay's Grass-yellow. **Wingspan:** ♂ 30 mm, ♀ 34 mm. **Similar species:** No-brand Grass-yellow, Lined Grass-yellow, Small Grass-yellow. Pink Grass-yellow 'wet-season forms' have the HW upperside black terminal band reduced to discrete spots at the ends of the veins, and the inner edge of the FW upperside black apical and terminal band evenly curved. 'Dry-season forms' have the HW underside ground colour pink or brownish-pink, with two curved dark grey streaks. **Variation:** two seasonal forms. **Behaviour:** adults fly slowly close to the ground. Probably several generations completed annually. Breeding is seasonal, being limited to summer and autumn; during the dry season, when the larval food plant dries off and loses its foliage, females stop reproducing and aggregate in refugia, usually in more open, drier areas than those of other grass-yellows. Adults do not migrate, but they may make temporary southern extensions in range during favourable seasons. **Habitat:** grassy woodland, where the larval food plant grows as a small herb. **Status:** common and widespread. **Larval food plant:** *Chamaecrista*.



No-brand Grass-yellow

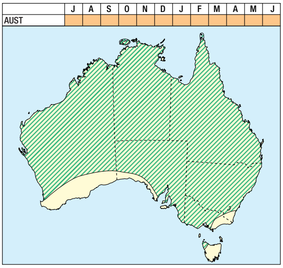


Lined Grass-yellow



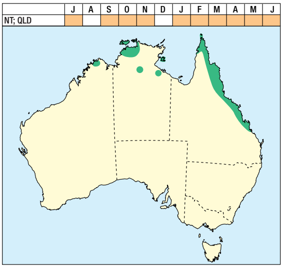
Pink Grass-yellow

Small Grass-yellow *Eurema smilax*



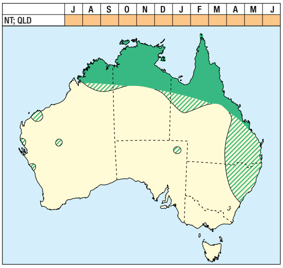
Wingspan: ♂ 30 mm, ♀ 33 mm. **Similar species:** No-brand Grass-yellow, Lined Grass-yellow, Pink Grass-yellow, Large Grass-yellow. Small Grass-yellow 'wet-season forms' have the HW upperside black terminal band reduced to discrete spots at the ends of the veins, and the inner edge of the FW upperside black terminal band sharply indented between veins M$_3$ and CuA$_1$. 'Dry-season forms' have brown markings on the HW underside. **Variation:** two seasonal forms, more pronounced in females in subtropics. **Behaviour:** adults fly close to ground amongst understorey shrubs, usually in a slow and erratic manner. They migrate opportunistically, following changes in larval food availability according to rainfall. In se. QLD, adults are present throughout the year and breed continuously; following the wet season during autumn-winter, part of the population migrates northward to breed temporarily in the tropics. In the temperate zone, adults move southward during spring or autumn but do not breed in the coastal-subcoastal areas. **Habitat:** wide variety of habitats, but especially open-woodland, grassland and arid shrubland in dry inland areas. **Status:** very common and widespread. **Larval food plants:** *Senna acclinis, S. coriaceae, S. coronilloides, S. nemophila, S. petiolaris, S. retusa, Neptunia gracilis, N. monospermal, *Senna auriculata, *Cassia fistula.*

Scalloped Grass-yellow *Eurema alitha*

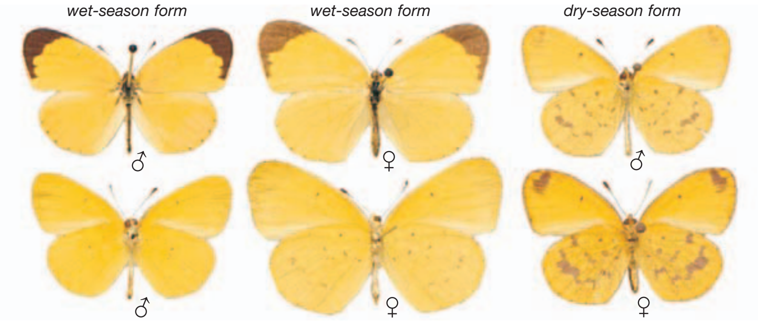


Wingspan: ♂ 35 mm, ♀ 35 mm. **Similar species:** Large Grass-yellow. The Scalloped Grass-yellow is smaller, has the upperside colour richer yellow, the inner edge of the FW upperside black terminal band obliquely and more sharply indented between veins M$_3$ and CuA$_2$, and the HW upperside black terminal band broader and extending slightly inwards along the veins. **Variation:** two seasonal forms. **Behaviour:** adults fly close to the ground amongst the grass. They appear to breed throughout the year, but are most abundant between Feb and Apr; rate of reproduction declines during the dry season. **Habitat:** savannah woodland and grassland, mainly in coastal lowlands where the larval food plant grows as a spreading ground cover climber or creeper on well drained soils. **Status:** common but local. **Larval food plant:** *Glycine tabacina*.

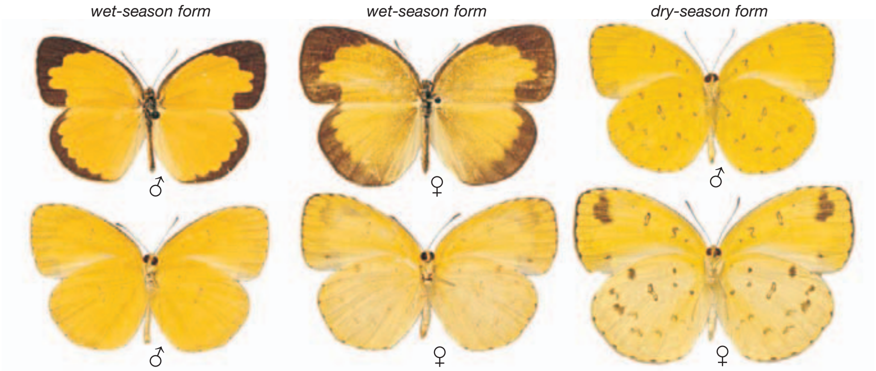
Large Grass-yellow *Eurema hecabe*



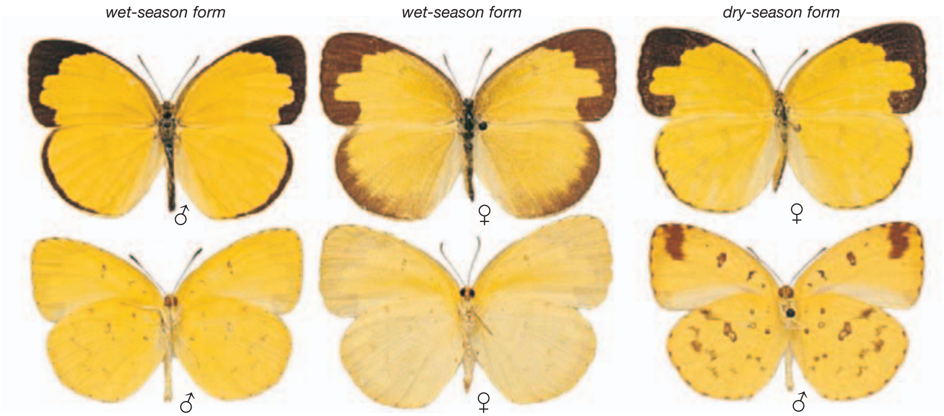
Other name: Common Grass-yellow. **Wingspan:** ♂ 37 mm, ♀ 40 mm. **Similar species:** Small Grass-yellow, Scalloped Grass-yellow. The Large Grass-yellow has the inner edge of the FW upperside black terminal band sharply indented between veins M$_3$ and CuA$_2$, and the HW upperside black terminal band narrow with a straight inner edge. **Variation:** two seasonal forms, with intermediate forms, more pronounced in females. **Behaviour:** adults have a slow, erratic flight close to the ground. Several generations completed annually, with adults most abundant during autumn-winter in the tropics. North of the tropic, populations breed regularly, although during the dry season adults disperse opportunistically in search of suitable larval food plants. In summer and autumn they migrate southward, occasionally being recorded well outside the normal tropical breeding range. **Habitat:** wide variety of habitats, especially savannah woodland and open country where the larval food plants grow. **Status:** very common and widespread. **Larval food plants:** usually *Sesbania javanicus* in ne. QLD; also *Cassia, Senna, Breynia, Phyllanthus, Aeschynomene, Indigofera, Acacia, *Aeschynomene, *Trifolium, *Albizia, *Leucaena.*



Small Grass-yellow

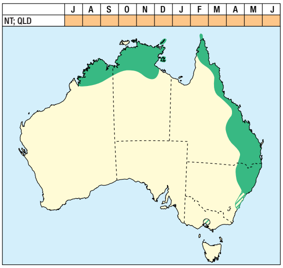


Scalloped Grass-yellow



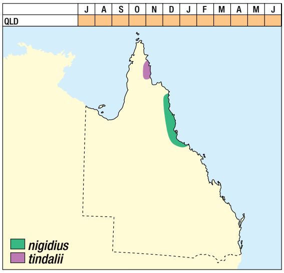
Large Grass-yellow

Caper Gull *Cepora perimale*



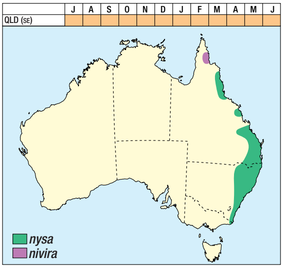
Other names: Australian Gull, Northern Gull. **Wingspan:** ♂ 43 mm, ♀ 43 mm. **Similar species:** Yellow Albatross, Caper White. Caper Gull 'wet-season forms' are smaller, have yellow subapical spots on the FW underside which run parallel to the termen, and the inward extension of the brown terminal band between veins M_3 and CuA_1 on the FW is more pronounced than in Yellow Albatross females. It has the underside ground colour uniformly yellow, orange or brown without black veins, and a broad brown terminal band on the HW underside compared to the Caper White. **Variation:** underside ground colour varies seasonally and geographically; number and extent of upperside white subterminal spots varies geographically. **Behaviour:** adults fly rapidly, their flight being faster than that of the Caper White. Probably several generations completed annually in the tropics. Adults occasionally disperse southwards outside the normal breeding range to se. NSW and near Melbourne. **Habitat:** monsoon forest (vine thicket); also eucalypt woodland and open-forest, where the larval food plants grow. **Status:** common and widespread. **Larval food plants:** *Capparis canescens, C. mitchellii, C. sepiaria.*

Yellow-banded Jezebel *Delias ennia*

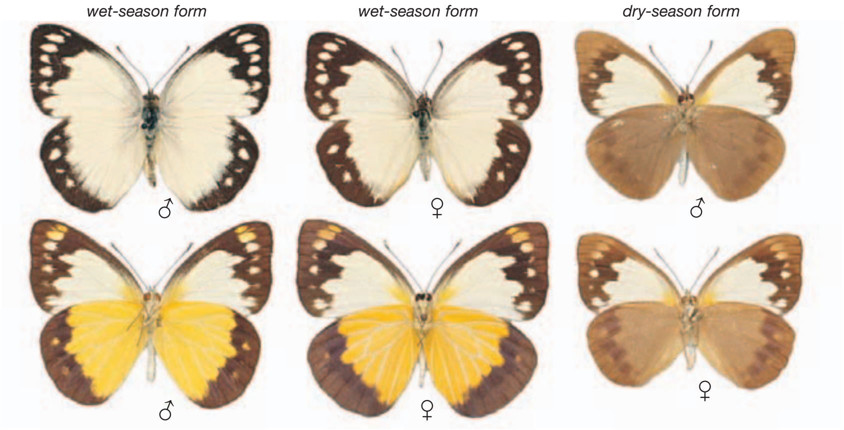


Other names: Nigidius Jezabel, Tindale's Jezebel. **Wingspan:** ♂ 54 mm, ♀ 52 mm. **Similar species:** Orange Albatross. Males of the northern subspecies of the Yellow-banded Jezebel (*D. e. tindalii*) have orange subterminal spots on the HW underside, and the apex of the FW more rounded. **Variation:** two subspecies. **Behaviour:** adults fly in the mid-canopy, often near creeks and watercourses. Probably several generations completed annually, with adults most abundant in Apr–May or during winter. **Habitat:** usually upland rainforest (above 500 m), where the mistletoe food plant grows as a parasitic shrub on various trees; also wet lowland rainforest and gallery forest. **Status:** common but local. **Larval food plant:** *Notothixos leiophyllus*.

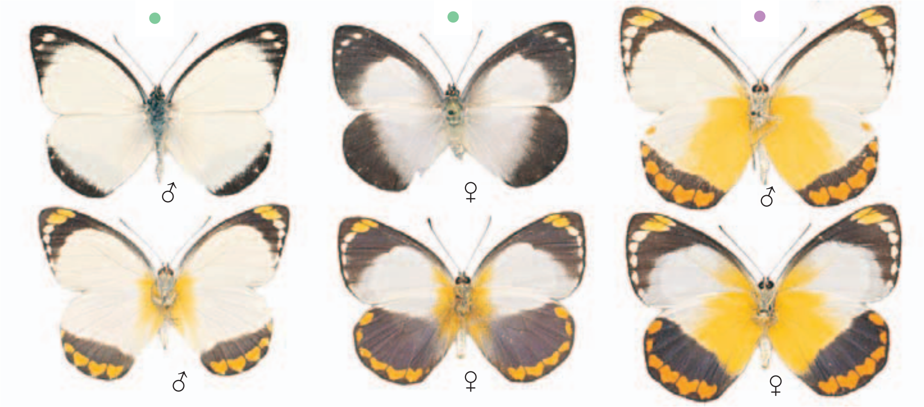
Yellow-spotted Jezebel *Delias nysa*



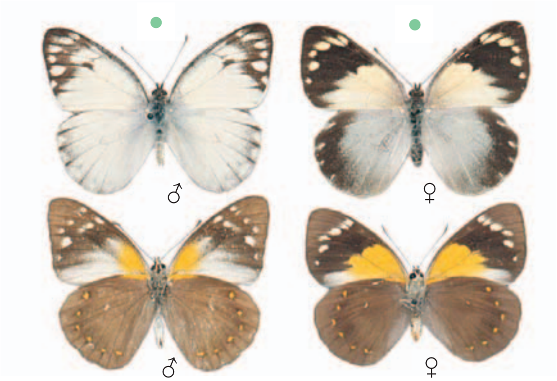
Other names: Nysa Jezabel, Nivira Jezabel. **Wingspan:** ♂ 47 mm, ♀ 46 mm. **Similar species:** none. The Yellow-spotted Jezebel has the HW underside ground colour dark brown, and a bright yellow basal patch on the FW underside. **Variation:** two subspecies. **Behaviour:** adults fly in the mid- to upper canopy along edges of the forest, occasionally descending closer to ground to feed from flowers. Males regularly fly on hilltops where they rapidly patrol the crowns of trees just below the canopy or sometimes lower down. Several generations completed annually, with adults most abundant during winter. **Habitat:** usually upland rainforest (above 500 m) in n. QLD; mixed vine scrub in lower rainfall areas and subtropical rainforest in wetter coastal areas in NSW, where the mistletoe food plant grows as a very small inconspicuous parasite. **Status:** generally common but local; less common south of Sydney. **Larval food plants:** *Korthalsella breviarticulata* in se. QLD; *K. rubra* in NSW.



Caper Gull

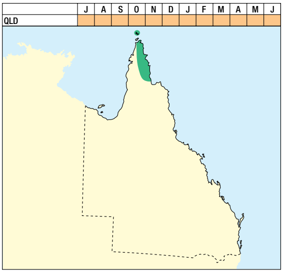


Yellow-banded Jezebel



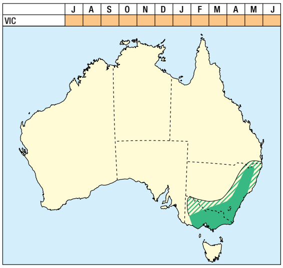
Yellow-spotted Jezebel

Golden Jezebel *Delias aruna*



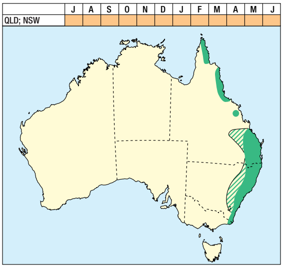
Other name: Orange Jezabel. **Wingspan:** ♂ 70 mm, ♀ 70 mm. **Similar species:** none. Golden Jezebel males have the upperside colour brilliant golden-yellow, and the HW underside ground colour black suffused with an iridescent dark bluish sheen and almost devoid of markings. **Behaviour:** adults are most active during the early morning and late afternoon; during the hottest part of the day they rest close to ground in shade on the underside of leaves of dense vegetation growing along creeks and watercourses. Probably two or more generations annually, with adults more abundant during the winter months. **Habitat:** tropical rainforest, where the mistletoe food plant grows as a parasitic shrub on trees of *Acacia*, *Eucalyptus Alphitonia* and *Commersonia*. Adults occasionally occur in open-forest but do not breed in this habitat. **Status:** common but local and restricted to the Torres Strait islands and Cape York Peninsula, from Cape York to near Coen, QLD. **Larval food plant:** *Dendrophthoe glabrescens*.

Imperial Jezebel *Delias harpalyce*

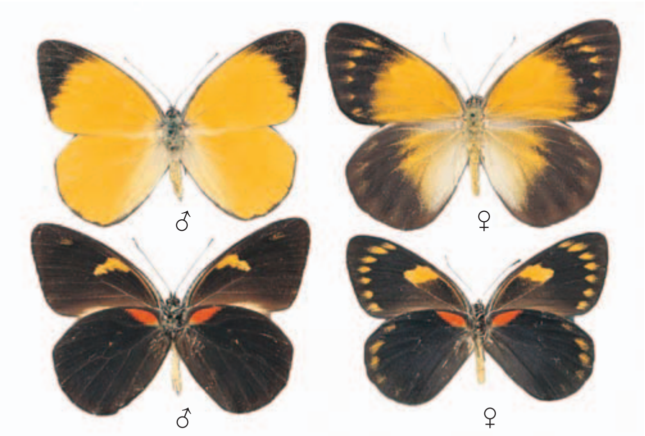


Other name: Imperial White. **Wingspan:** ♂ 67 mm, ♀ 72 mm. **Similar species:** Black Jezebel. The Imperial Jezebel has the HW underside scarlet postmedian band broader, and more yellow subterminal spots on the FW underside. **Variation:** two seasonal forms. **Behaviour:** adults soar and flutter slowly around the tops of trees where the larval food plants often grow, and readily feed from flowers. Males strongly hilltop and patrol the canopy during the morning or at other times when temperatures are cool but sunny. During hot weather flight activity ceases and adults aggregate in cool, moist refuges. At least two generations annually, with adults emerging mainly in early spring and late summer. Adults migrate irregularly and are occasionally recorded well inland of the Great Dividing Range outside the normal breeding range. **Habitat:** eucalypt open-forest and tall open-forest in the foothills and montane areas of and near the Great Dividing Range, usually below about 800 m in VIC, where the mistletoe food plants grow as parasitic shrubs on trees of *Eucalyptus* and *Acacia*. **Status:** common but local. **Larval food plants:** usually *Amyema miquelii, A. pendula, Muellerina eucalyptoides*; occasionally *A. congener, A. preissii, A. quandang*.

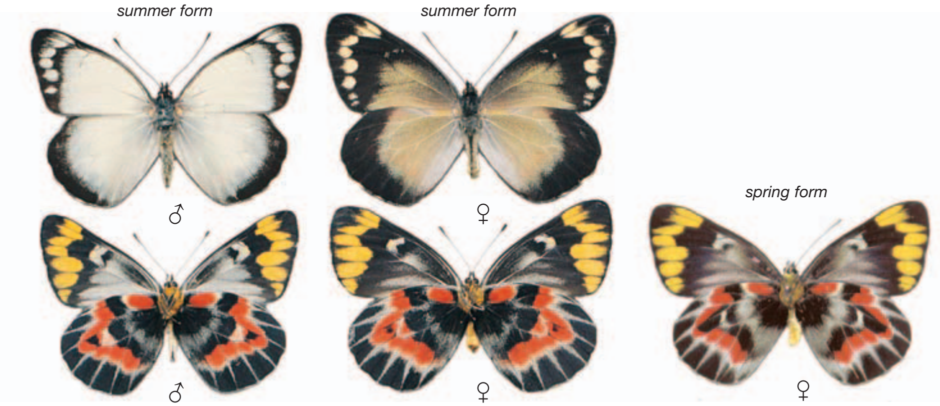
Black Jezebel *Delias nigrina*



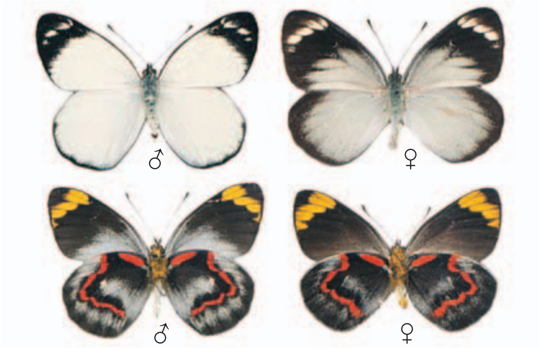
Other name: Common Jezabel. **Wingspan:** ♂ 56 mm, ♀ 56 mm. **Similar species:** Imperial Jezebel, Jezebel Nymph. The Black Jezebel has proportionally shorter antennae, and a more rounded FW termen compared to the Jezebel Nymph. **Behaviour:** adults typically fly high in the canopy but may descend closer to ground to feed from flowers such as *Lantana*; during hot weather they become less active and rest in cooler, shady situations. Males commonly hilltop. Several generations completed annually, with adults more abundant in winter. Adults migrate and northerly movements may occur during autumn in NSW; vagrants occasionally occur west of the Great Dividing Range far outside the normal breeding range. **Habitat:** usually upland rainforest in n. QLD; upland and lowland rainforest and moist coastal open-forest in NSW, where the mistletoe food plants grow as parasitic shrubs on native trees; rarely breeds in eucalypt woodland. **Status:** common but local. **Larval food plants:** *Amyema cambagei, A. congener, A. miquelii, A. quandang, Dendrophthoe curvata, D. glabrescens, D. vitellina, Muellerina celastroides, M. eucalyptoides*.



Golden Jezebel

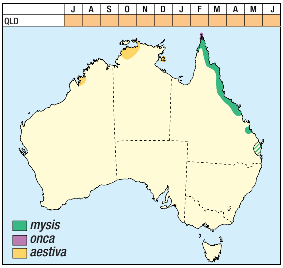


Imperial Jezebel



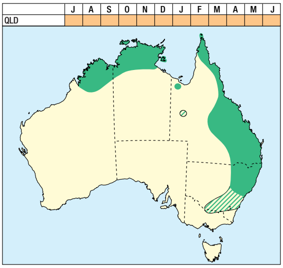
Black Jezebel

Red-banded Jezebel *Delias mysis*



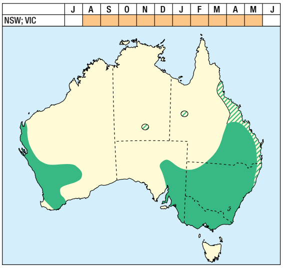
Other names: Union Jack, Mysis Jezabel. **Wingspan:** ♂ 57 mm, ♀ 56 mm. **Similar species:** Jezebel Nymph. The Red-banded Jezebel has proportionally shorter antennae, and a more rounded FW termen. **Variation:** three subspecies. **Behaviour:** adults fly high in the canopy but may descend closer to ground to feed from flowers, particularly during the morning. During hot weather they may rest close to ground on a leaf in the shade. Probably several generations completed annually, with adults more abundant towards the end of the wet season in Apr and May in upland areas or during the winter dry season in lowland areas. Adults appear to disperse seasonally. **Habitat:** usually coastal paperbark swampland and mangrove in NT; upland rainforest, edges of lowland rainforest and gallery forest in n. QLD, where the mistletoe food plants grow as parasitic shrubs on various trees. Adults sometimes occur in coastal paperbark woodland and eucalypt open-forest and woodland in QLD but do not appear to regularly breed in these habitats. **Status:** generally common but local; uncommon in nw. Australia and se. QLD south of Mackay. **Larval food plants:** *Dendrophthoe curvata, D. glabrescens, D. vitellina* in the Wet Tropics, QLD.

Scarlet Jezebel *Delias argenthona*

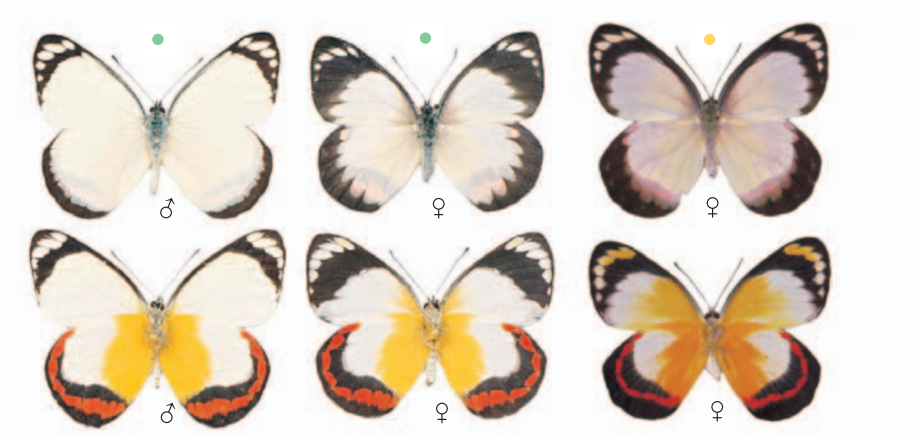


Other name: Northern Jezabel. **Wingspan:** ♂ 62 mm, ♀ 61 mm. **Similar species:** Spotted Jezebel. The Scarlet Jezebel has broader FWs, and lacks a black spot below the FW underside cell. **Variation:** two seasonal forms, with intermediate forms. **Behaviour:** adults usually fly high in the canopy; they often feed from flowers such as *Melaleuca* and the larval food plants, especially during the dry season. Males regularly hilltop. Probably several generations completed annually, with adults more abundant during the cooler months. Adults make temporary and infrequent southerly extensions beyond the normal breeding range during spring or autumn in NSW, or westerly extensions in QLD in winter. **Habitat:** savannah woodland and coastal paperbark woodland, where the mistletoe food plants grow as root or aerial stem parasitic shrubs; also suburban areas. **Status:** common but local. **Larval food plants:** *Amyema, Dendrophthoe, Decaisnina signata, Diplatia furcata, Muellerina celastroides, Santalum lanceolatum.*

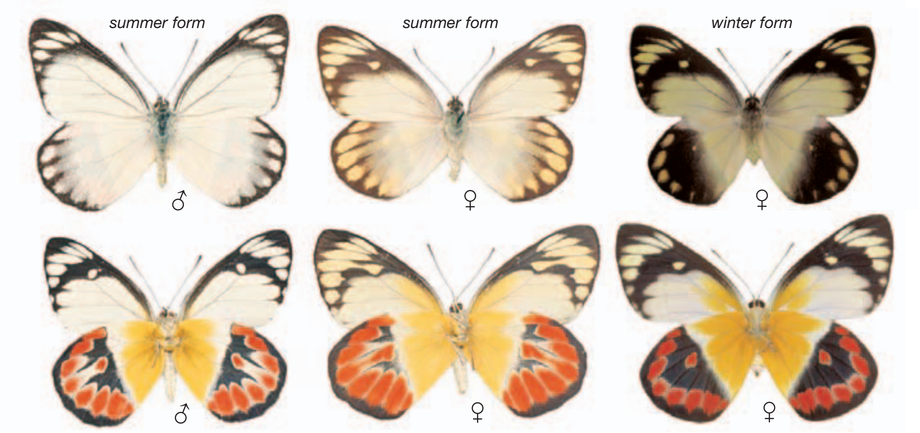
Spotted Jezebel *Delias aganippe*



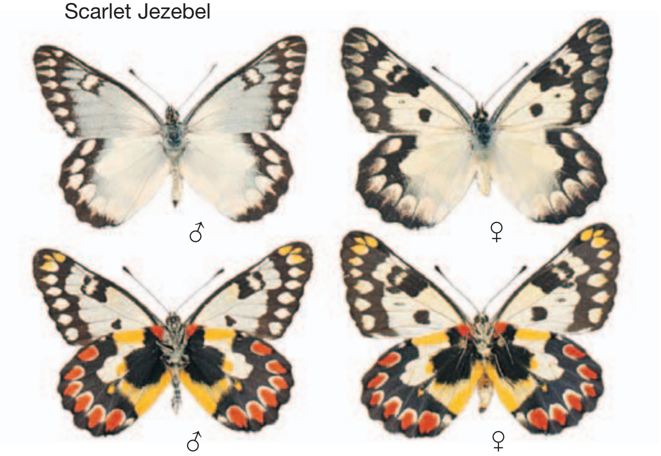
Other names: Wood White, Red-spotted Jezebel. **Wingspan:** ♂ 61 mm, ♀ 63 mm. **Similar species:** Scarlet Jezebel. The Spotted Jezebel has narrower FWs, and conspicuous black spots below, and at the end of, the FW cell. **Variation:** two seasonal forms. **Behaviour:** adults have a gliding flight with wings outspread, interspersed by a series of relatively short but rapid wing beats; the flight is somewhat faster than that of other jezebels. They frequently feed from flowers of eucalypts and mistletoes. Males congregate on hilltops where they fly high and patrol the canopy of the tallest trees to establish territories. At least two generations annually in se. Australia. Adults migrate but the movement patterns are complex and not fully understood; in some years adults reach ne. QLD but rarely breed or only breed temporarily. **Habitat:** drier eucalypt open-forests and woodlands, where the larval food plants grow as parasitic trees or shrubs. **Status:** common and widespread; rare in coastal areas of QLD and ne. NSW. **Larval food plants:** *Amyema, Exocarpos, Santalum.*



Red-banded Jezebel

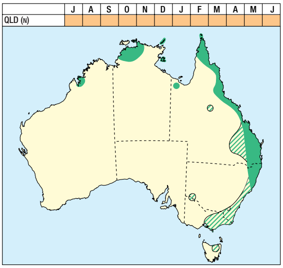


Scarlet Jezebel



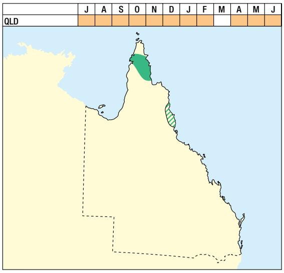
Spotted Jezebel

Yellow Albatross *Appias paulina*



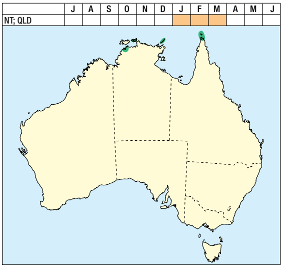
Other name: Common Albatross. **Wingspan:** ♂ 53 mm, ♀ 53 mm. **Similar species:** Caper Gull, Cabbage White. Yellow Albatross females are larger, have white subapical spots on the FW underside, which do not run parallel to the termen, and the inward extension of the brown terminal band between veins M_3 and CuA_1 on the FW is less pronounced than in Caper Gull 'wet-season forms'. Males are larger, have the apex of the FW more pointed, and the HW underside ground colour is richer yellow than in the Cabbage White. **Behaviour:** adults fly rapidly and males are often found on hilltops. Probably several generations completed annually. Adults are migratory and in favourable seasons they occasionally disperse southward during summer to se. NSW, ACT, e. and c. VIC and rarely TAS but do not breed in these temperate areas. In QLD, it occasionally extends inland west of the Great Dividing Range, but breeding populations are not established in these areas. **Habitat:** rainforest and monsoon forest (including vine thicket), where the usual larval food plant grows. Adults also occur in open-forest but do not breed in these habitats. **Status:** common and widespread. **Larval food plants:** usually *Drypetes deplanchei*; also *Capparis canescens* in ne. QLD.

Orange Albatross *Appias ada*

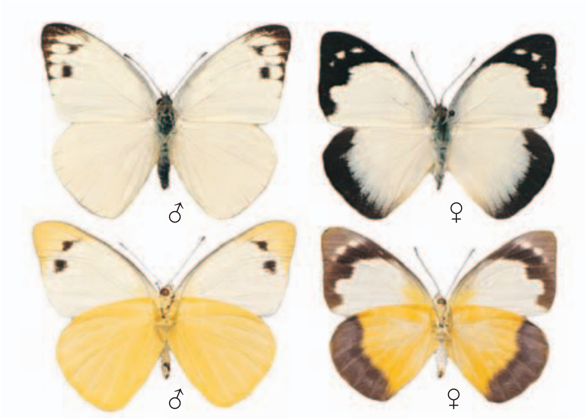


Other name: Rare Albatross. **Wingspan:** ♂ 59 mm, ♀ 54 mm. **Similar species:** Yellow-banded Jezebel. Orange Albatross males have a broad brown terminal band on the HW underside without orange subterminal spots, and the apex of the FW more pointed compared to the northern subspecies of the Yellow-banded Jezebel (*Delias ennia tindalii*). **Behaviour:** adults fly rapidly and may be observed along watercourses. Probably several generations completed annually, with adults more abundant after periods of rain. Adults occasionally disperse south to the Wet Tropics, QLD. **Habitat:** tropical rainforest, where the larval food plant grows. **Status:** common but breeding populations restricted to Cape York Peninsula, QLD. **Larval food plant:** *Crateva religiosa*.

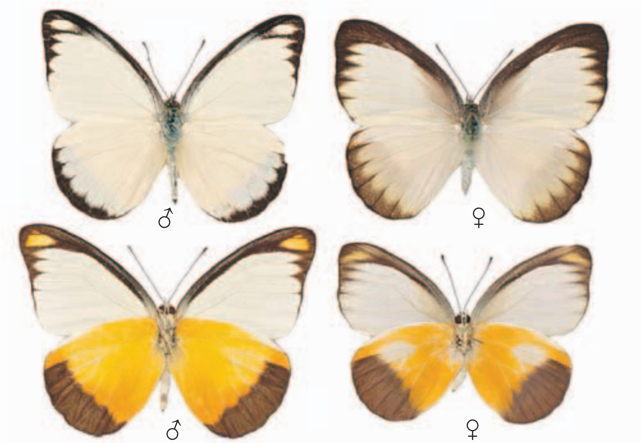
White Albatross *Appias albina*



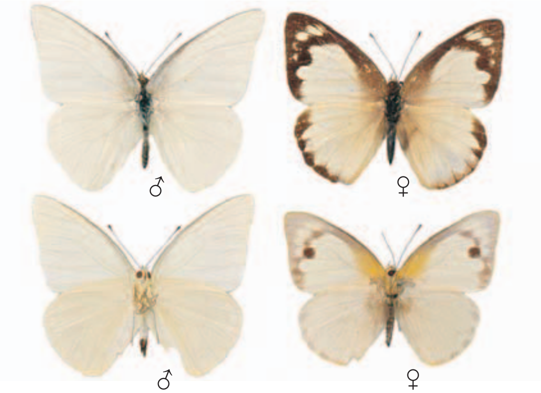
Wingspan: ♂ 51 mm, ♀ 48 mm. **Similar species:** none. White Albatross males have the apex of the FW very pointed, and the upperside pattern uniformly white. **Behaviour:** not recorded. Most specimens have been collected during the wet season. **Habitat:** adults have been collected in monsoon forest (vine thicket), where they are believed to breed permanently. **Status:** rare, local and restricted, known only from a few specimens along the northern coast of NT and adjacent islands, and the Torres Strait islands, QLD. **Larval food plant:** not recorded, but almost certainly Capparaceae.



Yellow Albatross

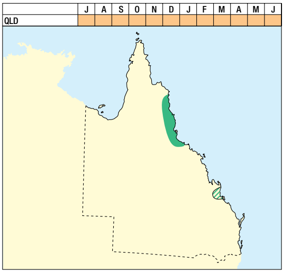


Orange Albatross



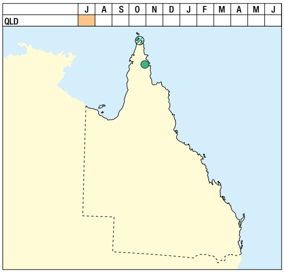
White Albatross

Grey Albatross *Appias melania*



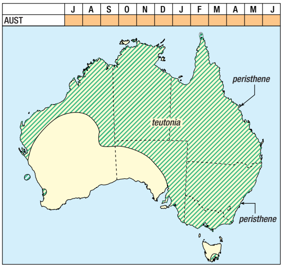
Wingspan: ♂ 54 mm, ♀ 55 mm. **Similar species:** Blue Albatross. Grey Albatross males have white areas on the FW upperside, the FW upperside black apical area broader, and the FW underside cell orange. **Behaviour:** adults fly very rapidly and readily feed from flowers, such as *Lantana* growing on the edges of the forest. Number of generations completed annually not recorded; adults vary seasonally in abundance. They appear to undertake spasmodic southward migrations. **Habitat:** upland rainforest, where the larval food plant grows. **Status:** very common but local and restricted mainly to montane areas of the Wet Tropics, QLD. **Larval food plant:** *Drypetes*.

Blue Albatross *Appias celestina*

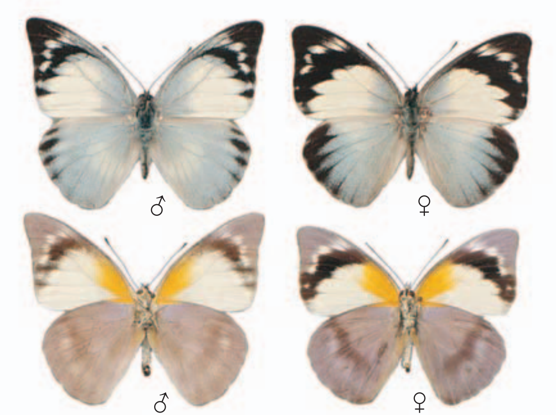


Wingspan: ♂ 59 mm, ♀ 59 mm. **Similar species:** Grey Albatross. Blue Albatross males have the upperside colour uniformly grey-blue without white areas, the FW upperside black apical area narrower, and the underside ground colour uniformly grey-white, without the orange FW cell. **Behaviour:** not recorded. **Habitat:** an adult has recently been collected in tropical rainforest at Iron Range, QLD, where populations may breed permanently. **Status:** rare and restricted, known only from a few specimens from Cape York Peninsula, QLD. **Larval food plant:** not recorded.

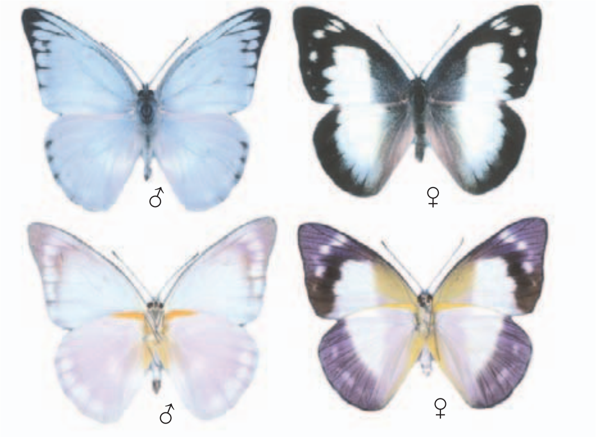
Caper White *Belenois java*



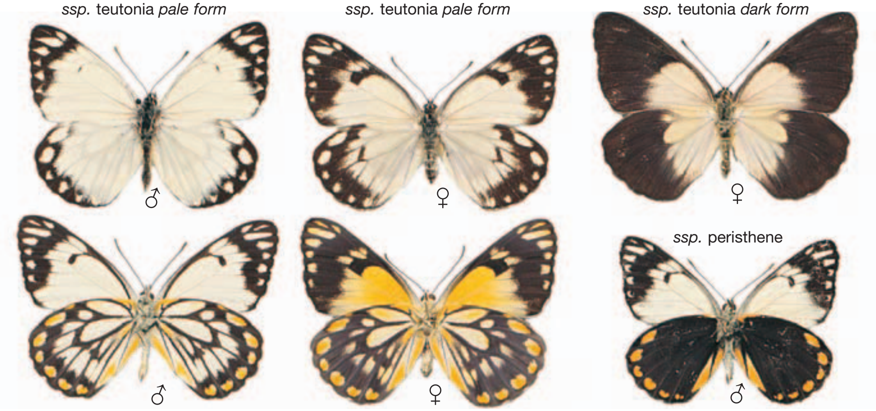
Wingspan: ♂ 55 mm, ♀ 55 mm. **Similar species:** Caper Gull, jezebels. The Caper White has black veins and orange-yellow subterminal spots on the HW underside. **Variation:** two subspecies; *B. j. teutonia* has two polymorphic forms with occasional intermediate forms. **Behaviour:** males patrol in search of newly emerged females around large clusters of pupae and mating usually takes place soon afterwards. Adults regularly migrate but the movement patterns are complex and not fully understood; during migration they fly steadily about 2–3 m or more above the ground; at night they rest on trees and bushes and resume their flight the following day. The migrations usually last only a few weeks and, during favourable seasons, may comprise immense numbers of individuals. They frequently reach areas outside the normal breeding range in se. Australia during migration, but the populations are temporary in s. NSW, ACT, VIC, TAS and se. SA, although limited breeding may occur where the larval food plants are grown in cultivation. **Habitat:** wide variety of habitats, but mainly in inland areas west of the Great Dividing Range. **Status:** very common and widespread. **Larval food plants:** usually *Capparis canescens* in coastal and subcoastal QLD; *C. mitchellii* in arid areas; and *Apophyllum anomalum* in w. NSW; also *Capparis lasiantha, C. sepiaria, C. spinosa, C. umbonata. C. arborea.*



Grey Albatross



Blue Albatross


ssp. teutonia *pale form*

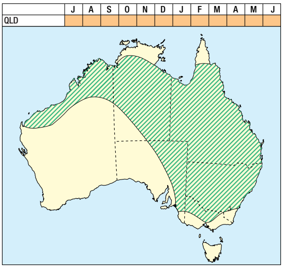
ssp. teutonia *pale form*

ssp. teutonia *dark form*

ssp. peristhene

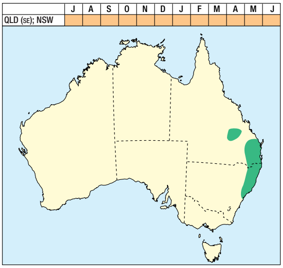
Caper White

Narrow-winged Pearl-white *Elodina padusa*



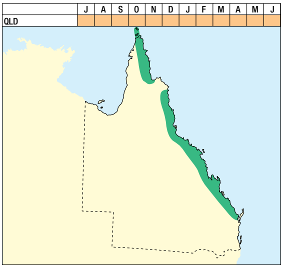
Wingspan: ♂ 38 mm, ♀ 40 mm. **Similar species:** pearl-whites. The Narrow-winged Pearl-white has the FWs narrower and more elongated, and a black subapical patch on the FW underside, which has the inner edge strongly produced and square-shaped. 'Dry-season forms' have the upperside creamish-white, rather than pearly white, and the HW underside ground colour pale brown or yellow-orange, with a pearly or glistening sheen (when freshly emerged). **Variation:** two seasonal forms. **Behaviour:** adults fly close to the ground. Their flight is somewhat faster, more direct and less erratic than that of the Cabbage White, with which they may be easily confused. Probably several generations completed annually. Adults possibly migratory: they have been recorded many hundreds of kilometres outside the natural range of the larval food plants, and vagrants occasionally reach se. Australia where breeding populations are not established. **Habitat:** wide variety of habitats, mainly in dry inland areas where the larval food plants grow. **Status:** common and widespread. **Larval food plants:** *Capparis canescens, C. mitchellii.*

Southern Pearl-white *Elodina angulipennis*

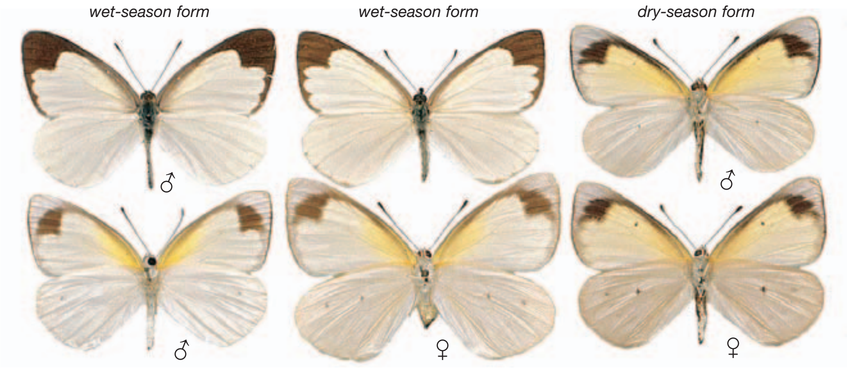


Other name: Common Pearl-white. **Wingspan:** ♂ 37 mm, ♀ 38 mm. **Similar species:** pearl-whites. The Southern Pearl-white usually has the FW upperside black apical patch broader with the inner edge forming a rounded projection. It has a pale cream-orange or 'apricot' suffusion on the FW underside, which is absent in the Glistening Pearl-white. **Variation:** shape of the FW, extent and shape of the FW upperside black apical patch, grey suffusion in the FW upperside cell, extent of the FW underside black subapical patch, and extent and number of the HW underside postmedian spots vary greatly. **Behaviour:** adults fly relatively slowly in the understorey and are conspicuous in flight. Probably several generations completed annually. **Habitat:** littoral rainforest, moist coastal upland rainforest and drier monsoon forests (deciduous vine thicket). **Status:** common and widespread. **Larval food plants:** *Capparis canescens* in QLD; *C. arborea* in NSW.

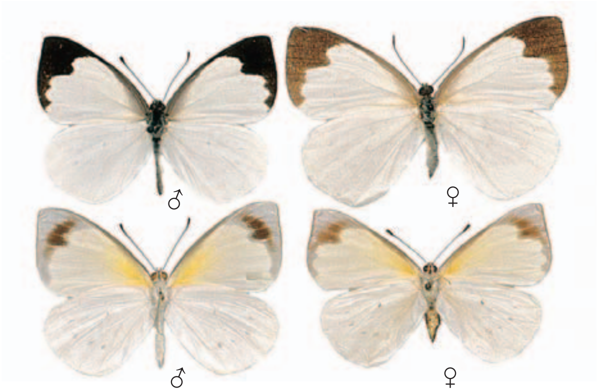
Glistening Pearl-white *Elodina queenslandica*



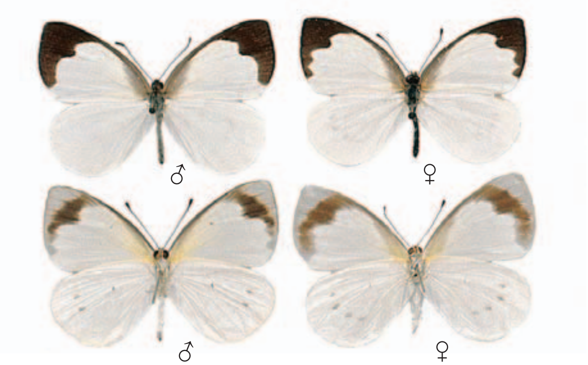
Other names: Cape York Pearl-white, Kuranda Pearl-white. **Wingspan:** ♂ 36 mm, ♀ 38 mm. **Similar species:** pearl-whites. The Glistening Pearl-white usually has the FW upperside black apical patch broader with the inner edge forming a rounded projection. It has the FW underside ground colour white, rather than pale cream-orange, compared to the Southern Pearl-white. **Variation:** shape of the FW, extent and shape of the FW upperside black apical patch, extent of grey suffusion in the FW upperside cell, extent of the FW underside black subapical patch, and extent and number of the HW underside postmedian spots vary greatly. **Behaviour:** adults fly relatively slowly in the understorey and are conspicuous in flight. Probably several generations completed annually. **Habitat:** rainforest, littoral rainforest and monsoon forest (vine thicket), where the larval food plant often grows into the canopy. **Status:** common and widespread. **Larval food plant:** *Capparis sepiaria.*



Narrow-winged Pearl-white

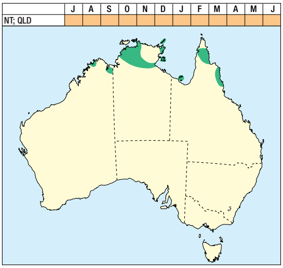


Southern Pearl-white



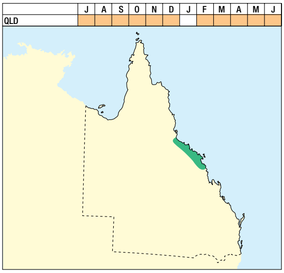
Glistening Pearl-white

Small Pearl-white *Elodina walkeri*



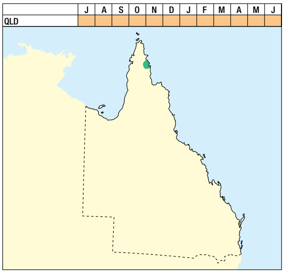
Other names: Northern Pearl-white, Walker's Pearl-white, Tongura Pearl-white, Carpentaria Pearl-white. **Wingspan:** ♂ 36 mm, ♀ 36 mm. **Similar species:** pearl-whites. The Small Pearl-white has the upper and underside ground colour pearly-white, the inner edge of the FW upperside black apical patch usually evenly curved without a prominent projection and not extending along veins CuA_1 and CuA_2, and lacks a prominent black subapical patch on the FW underside. 'Dry-season forms' are smaller than other pearl-whites. **Variation:** two seasonal forms. **Behaviour:** adults usually fly close to the ground, within about 1 m, in open areas, but sometimes higher where the understorey is heavily vegetated; they readily feed from flowers. Males spend much of their time patrolling and rarely settle. Number of generations completed annually not recorded. **Habitat:** usually edges of dry monsoon forest (riparian vine thicket); occasionally coastal rainforest and open-forest. **Status:** common but local. **Larval food plant:** *Capparis sepiaria*.

Delicate Pearl-white *Elodina perdita*

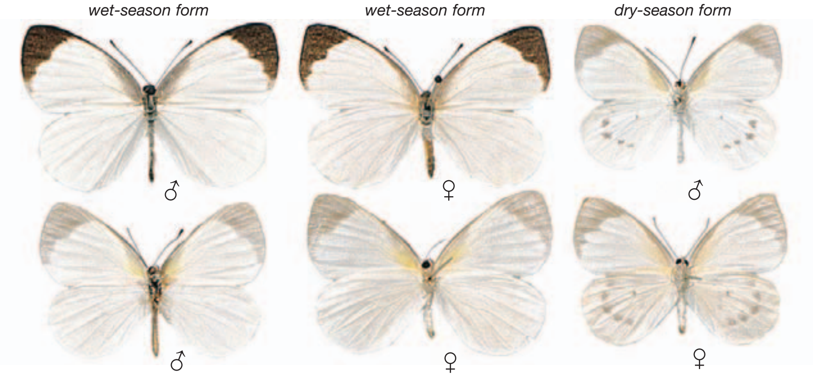


Other names: Coastal Pearl-white, Northern Pearl-white. **Wingspan:** ♂ 35 mm, ♀ 38 mm. **Similar species:** pearl-whites. The Delicate Pearl-white has the upper and underside ground colour pearly-white, the inner edge of the FW upperside black apical patch usually evenly curved without a prominent projection and extending along veins CuA_1 and CuA_2, and lacks a prominent black subapical patch on the FW underside. 'Dry-season forms' have the HW underside ground colour browner (males) or richer, darker cream (females) than in Small Pearl-white 'dry-season forms'. **Variation:** two seasonal forms. **Behaviour:** not recorded. **Habitat:** monsoon forest on coastal sand dunes, where the larval food plant normally grows. Adults also occur in adjacent paperbark woodland and swampland but do not appear to breed in these habitats. **Status:** uncommon and restricted to the remnant coastal lowlands between Ingham and Mackay, QLD. **Larval food plant:** *Capparis sepiaria*.

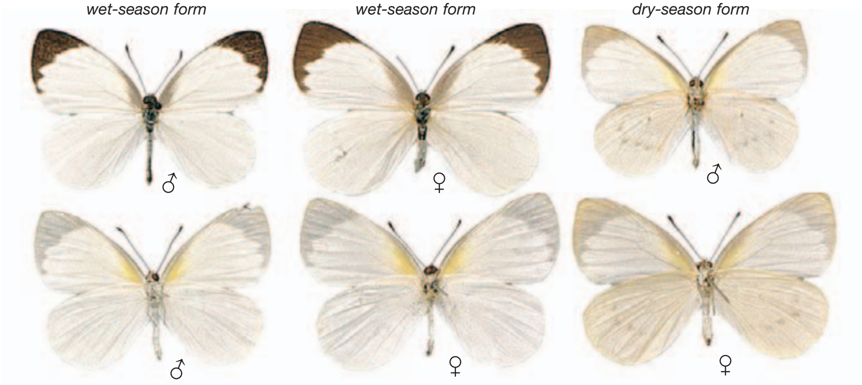
Cape York Pearl-white *Elodina claudia*



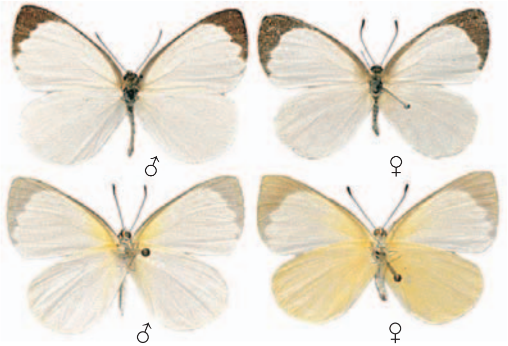
Other name: Claudie Pearl-white. **Wingspan:** ♂ 35 mm, ♀ 37 mm. **Similar species:** pearl-whites. The Cape York Pearl-white has the upperside colour pearly-white, the inner edge of the FW upperside black apical patch without a projection and extending along veins CuA_1 and CuA_2, and lacks a prominent black subapical patch on the FW underside. **Behaviour:** adults usually fly close to the ground. Number of generations completed annually not recorded. **Habitat:** adults have been collected along the edges of riparian closed-forest. **Status:** uncommon and restricted to Iron Range on Cape York Peninsula, QLD. **Larval food plant:** not recorded.



Small pearl-white

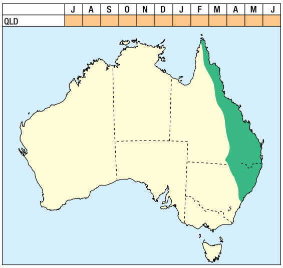


Delicate Pearl-white



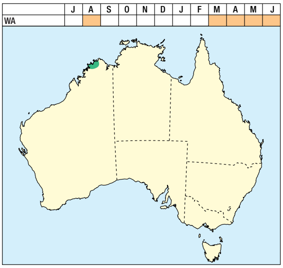
Cape York Pearl-white

Striated Pearl-white *Elodina parthia*



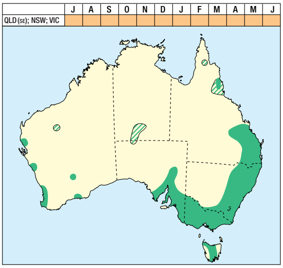
Other name: Chalk White. **Wingspan:** ♂ 38 mm, ♀ 37 mm. **Similar species:** pearl-whites. The Striated Pearl-white has the inner edge of the FW upperside black apical patch strongly produced and square-shaped, the FW underside cell orange, and lacks a black subapical patch on the FW underside. 'Dry-season forms' have the upperside colour creamish-white, rather than pearly white, and extensive brown markings on the HW underside. **Variation:** two seasonal forms, with intermediate forms. **Behaviour:** adults usually fly close to the ground, their flight being relatively slow and weak. Probably several generations completed annually. **Habitat:** drier eucalypt forests and woodlands on the slopes of and near the Great Dividing Range. **Status:** common and widespread; less common south of the Manning River near Taree, NSW. **Larval food plants:** *Capparis arborea, C. canescens, C. sarmentosa, C. spinosa.*

Black-spotted White *Leptosia nina*

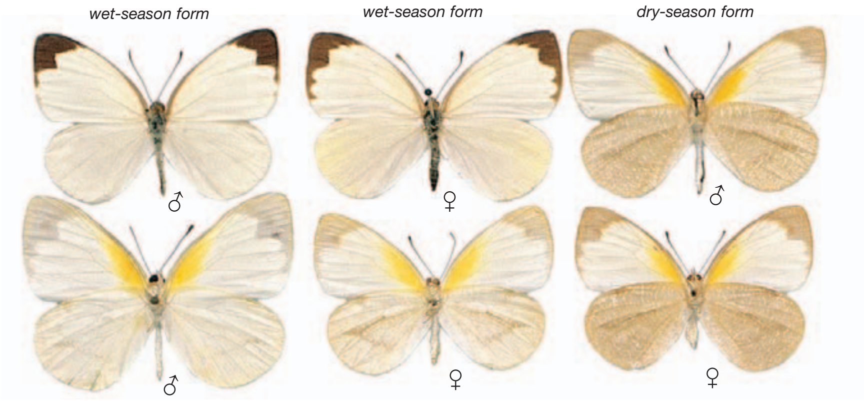


Other name: The Psyche. **Wingspan:** ♂ 29 mm, ♀ 34 mm. **Similar species:** pearl-whites. The Black-spotted White has more rounded FWs, with a prominent black postmedian spot on the upperside. **Behaviour:** adults fly close to the ground, their flight being somewhat slower and weaker than that of pearl-whites. Number of generations completed annually not recorded. **Habitat:** monsoon forest (vine thicket), particularly along seasonal creek beds or on bauxite with groundwater seepage. **Status:** common but restricted to the Kimberley and adjacent islands, WA. **Larval food plants:** almost certainly *Capparis sepiaria* and other Capparaceae.

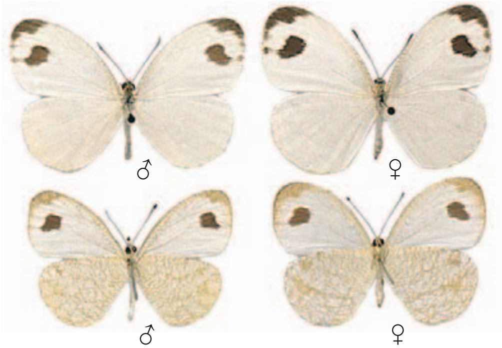
Cabbage White *Pieris rapae*



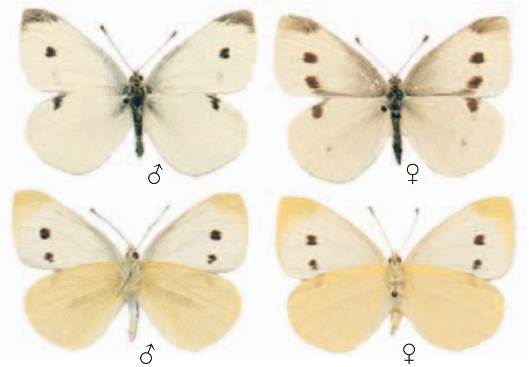
Wingspan: ♂ 44 mm, ♀ 44 mm. **Similar species:** pearl-whites, Yellow Albatross. The Cabbage White has two black spots on the FW underside, and a smaller black apical patch on the FW upperside compared to species of pearl-whites. It is smaller than Yellow Albatross males, with the apex of the FW less pointed, and the HW underside ground colour paler yellow. **Variation:** extent of black suffusion on HW underside varies seasonally. **Behaviour:** adults have an erratic flight and frequently feed from flowers; they disperse considerable distances. Males patrol the ground vegetation in search of females. During courtship the male flies behind and slightly below the female, after a series of loops in which the positions are reversed, they settle side by side to mate; mated females may reject males by lowering their wings and raising the abdomen in the air. Up to five generations annually in temperate areas, with adults flying from late winter-early spring to late autumn-early winter. **Habitat:** suburban gardens, farmlands and disturbed habitats where the introduced larval food plants are established. Adults often occur in natural bushland but rarely breed in these habitats. **Status:** very common and widespread; introduced to Australia. **Larval food plants:** usually **Brassica*; also **Hirschfeldia incana*, **Lepidium africanum*, **Sisymbrium officinale*, **Cleome*, **Reseda*, **Tropaeolum*.



Striated Pearl-white

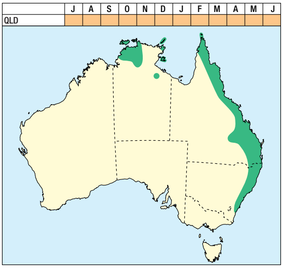


Black-spotted White



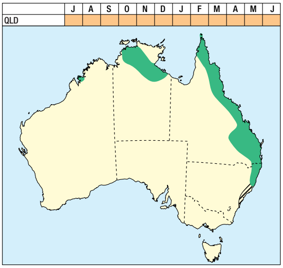
Cabbage White

Dusky Knight *Ypthima arctous*



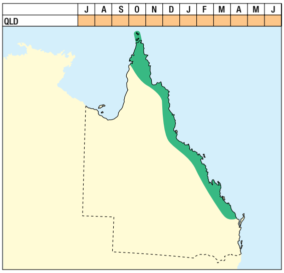
Other name: Dingy Ring. **Wingspan:** ♂ 28 mm, ♀ 32 mm. **Similar species:** none. The Dusky Knight has a single double-centred eyespot on the FW. **Behaviour:** adults usually have a slow, weak, jerky flight close to the ground, often settling on grasses to rest or bask; their activity peaks around midday in the tropics, and they readily feed from flowers from a wide range of plants. Probably several generations completed annually, with females breeding throughout the year, even in the driest months. **Habitat:** wide variety of coastal and subcoastal woodlands and open-forests with a grassy understorey, typically in the more open, sunny areas; usually confined to moister riparian habitats in drier subcoastal areas of n. QLD. **Status:** common and widespread; less common in se. NSW and VIC. **Larval food plants:** Poaceae, including *Imperata cylindrica*.

Evening Brown *Melanitis leda*

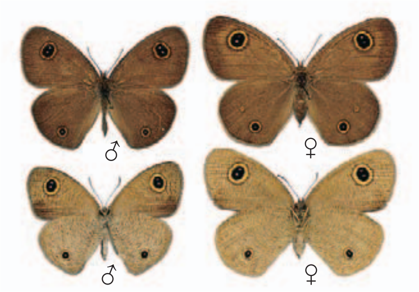


Wingspan: ♂ 60 mm, ♀ 63 mm. **Similar species:** none. The Evening Brown has an obscure orange subapical patch enclosing two black spots each centred with white on the FW upperside. **Variation:** two seasonal forms; underside of ‘dry-season form’ extremely variable. **Behaviour:** adults fly with a rapid and powerful flight at dawn and again at dusk; they feed from ripe fruits and are attracted to light. After sunset males establish territories along forest edges by perching, with wings closed, on leaves, stumps, branches or sometimes blades of tall grass 1–2 m above the ground. Several generations completed annually, with adults most abundant during the wet season. During the long dry season females stop breeding and aggregate in moist refugia such as along creek banks. Adults disperse seasonally according to local climatic conditions, occasionally reaching the Sydney district. **Habitat:** wide variety of habitats, including suburban gardens and parks. **Status:** very common and widespread. **Larval food plants:** *Chrysopogon, Heteropogon, Imperata, Leersia, Ophiuros, Themeda,* **Melinis, *Pennisetum, *Saccharum, *Sorghum, *Stenotaphrum*; possibly *Paspalidium*.

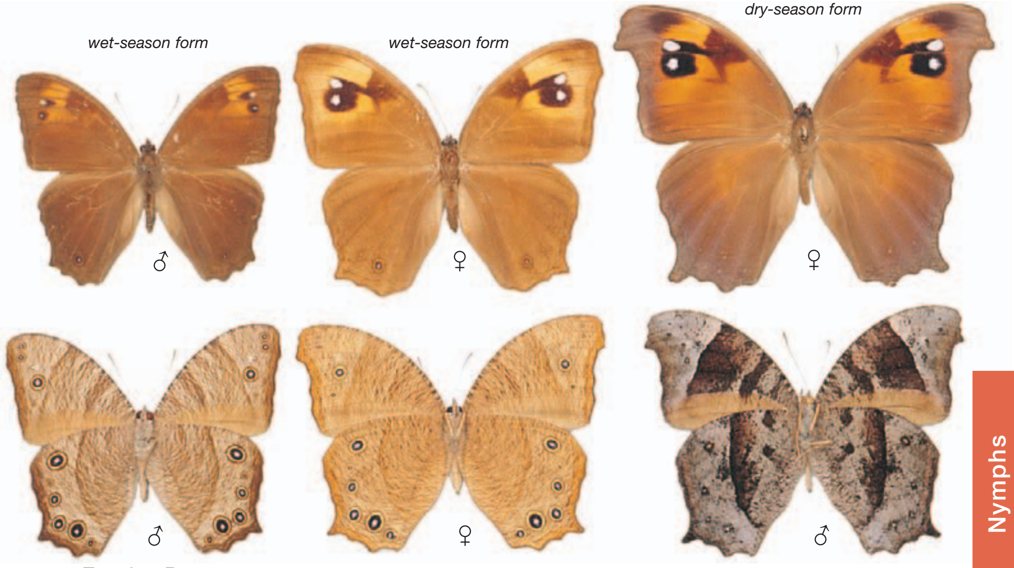
Orange Bush-brown *Mycalesis terminus*



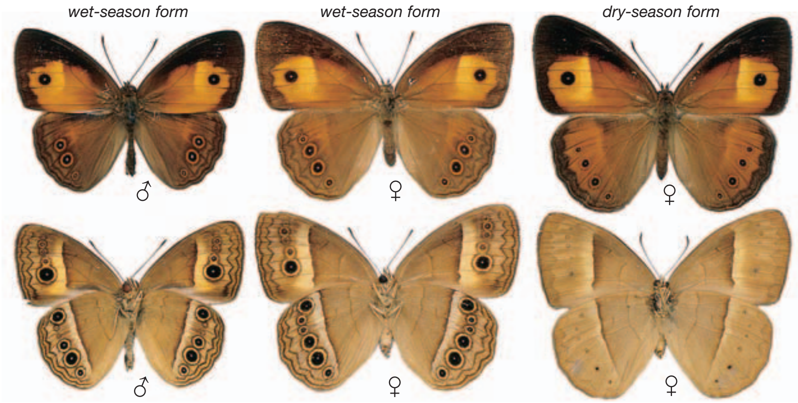
Wingspan: ♂ 38 mm, ♀ 43 mm. **Similar species:** none. The Orange Bush-brown has the upperside colour orange-brown, with a quadrate orange-yellow patch containing a white-centred black subterminal eyespot on the FW. **Variation:** two seasonal forms, with intermediate forms. **Behaviour:** adults fly amongst grasses and shrubs in the understorey, and are most active from late morning to early afternoon; they readily feed from rotting fruits and may bask early in the morning. Males perch on leaves of understorey plants 0.5–2 m above the ground to establish territories. Several generations completed annually, with adults most abundant during the dry season. Breeding declines as the dry season progresses and may cease late in the season when adults congregate in moist refugia such as along dry creek beds supporting gallery forest. Adults disperse during the wet season. **Habitat:** usually edges of tropical rainforest and gallery forest in moist coastal lowlands, preferring damp and shaded areas; also edges of wet upland rainforest, eucalypt open-forest with rainforest elements in understorey. **Status:** common and widespread. **Larval food plants:** usually *Oplismenus*; also *Themeda triandra, Imperata cylindrica, *Panicum maximum*; possibly *Dichanthium sericeum, *Axonopus compressus*.



Dusky Night

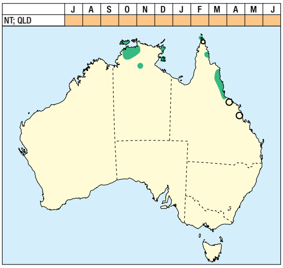


Evening Brown



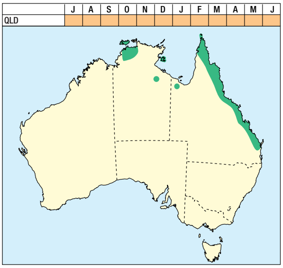
Orange Bush-brown

Cedar Bush-brown *Mycalesis sirius*



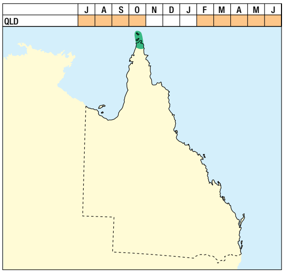
Wingspan: ♂ 38 mm, ♀ 42 mm. **Similar species:** Dingy Bush-brown. The Cedar Bush-brown has the upper and underside ground colour rich reddish-brown. **Variation:** two seasonal forms, with intermediate forms; 'dry-season forms' occur only in late winter-early spring. **Behaviour:** adults fly with a slow, meandering flight close to the ground amongst tall grasses. They are most active early in the morning and late afternoon; around midday they tend to rest for long periods on the ground, often in shaded areas. Several generations completed annually, with adults most abundant in the early to mid dry season. Females breed for much of the year, but reproduction declines as the dry season progresses and may cease late in the season at which time they may be found in moist refugia, such as densely vegetated areas in paperbark swamplands, along dry creek beds in eucalypt open-forest or rainforest edge. **Habitat:** usually lowland coastal paperbark woodland and swampland in higher rainfall areas, where the usual larval food plant grows; breeds irregularly in adjacent eucalypt open-forest, usually only after good wet seasons; rarely in montane areas such as the Atherton Tableland, QLD. **Status:** very common but local; range has contracted through extensive habitat loss. **Larval food plants:** usually *Ischaemum australe*; also *Themeda triandra*, **Panicum maximum*.

Dingy Bush-brown *Mycalesis perseus*

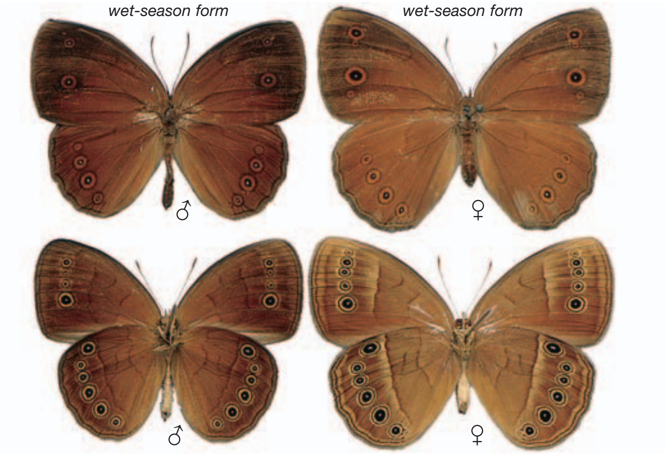


Wingspan: ♂ 35 mm, ♀ 38 mm. **Similar species:** Dusky Bush-brown, Cedar Bush-brown. **Variation:** two seasonal season forms, with intermediate forms in May–Jun. **Behaviour:** adults fly close to the ground amongst the grass in open sunlit areas; they are most active very early in the morning and late afternoon; when not flying they rest on the ground in the shade; they readily feed on rotting fruits. Several generations completed annually, with adults most abundant following new growth of the larval food plants after rainfall. Breeding is limited largely to the wet season; during the long dry season when the larval food plants decline in quality females stop breeding and aggregate in moist refugia. During the wet season there is considerable local movement and populations expand in range, taking advantage of the seasonally favourable conditions. **Habitat:** wide variety of habitats, but especially lowland savannah woodland and eucalypt open-forest with a grassy understorey; also suburban gardens. **Status:** very common and widespread. **Larval food plants:** usually *Themeda triandra*; also *Dichanthium sericeum*, *Heteropogon triticeus*, **Panicum maximum*; possibly *Aristida calycina*, *Brachiara*, *Eriachne*, *Heteropogon contortus*.

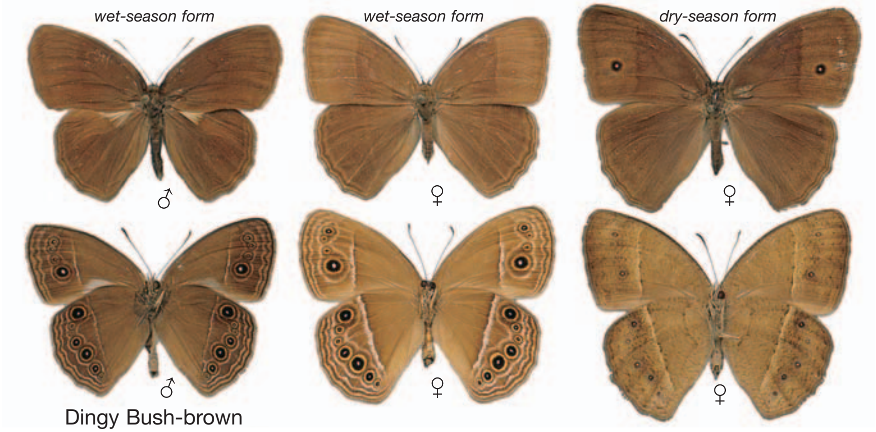
Dusky Bush-brown *Orsotriaena medus*



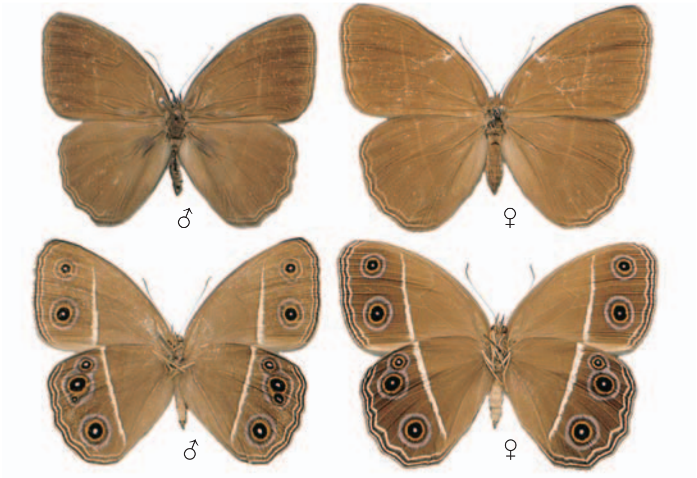
Other names: Smooth-eyed Bush-brown, Nigger. **Wingspan:** ♂ 41 mm, ♀ 44 mm. **Similar species:** Dingy Bush-brown. The Dusky Bush-brown has only three eyespots on the HW underside. **Behaviour:** adults fly close to the ground amongst tall grass. Probably several generations completed annually. **Habitat:** wet grassland and swampy areas with tall grasses, usually along the edges of lowland rainforest. **Status:** common but local and restricted to the Torres Strait islands and tip of Cape York Peninsula, QLD. **Larval food plants:** Poaceae.



Cedar Bush-brown

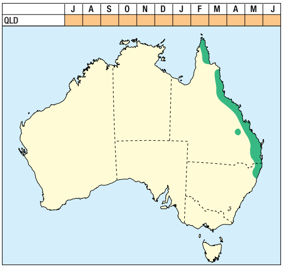


Dingy Bush-brown



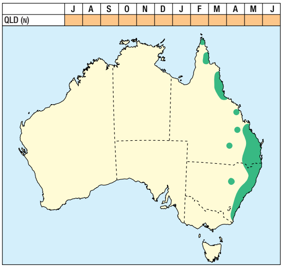
Dusky Bush-brown

Orange-streaked Ringlet *Hypocysta irius*



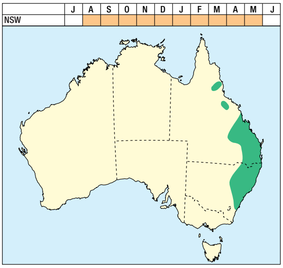
Other name: Northern Ringlet. **Wingspan:** ♂ 33 mm, ♀ 35 mm. **Similar species:** Brown Ringlet, Grey Ringlet. The Orange-streaked Ringlet has an orange patch on the FW upperside. **Behaviour:** adults fly in the understorey and occasionally feed from flowers; in the late dry season flight activity peaks during the late morning. Males perch on particular leaves or other objects within a few metres from the ground to establish territories. Several generations completed annually in n. QLD. Females breed continuously throughout the year but reproduction declines in the dry season. **Habitat:** edges of rainforest, gallery forest and eucalypt open-forest with rainforest elements in the understorey, mainly in moist coastal lowlands, preferring shaded areas with filtered sunlight where the larval food plants grow; also montane areas in ne. QLD but scarcer at higher altitudes; does not penetrate far inland. **Status:** common but local. **Larval food plants:** Poaceae.

Brown Ringlet *Hypocysta metirius*

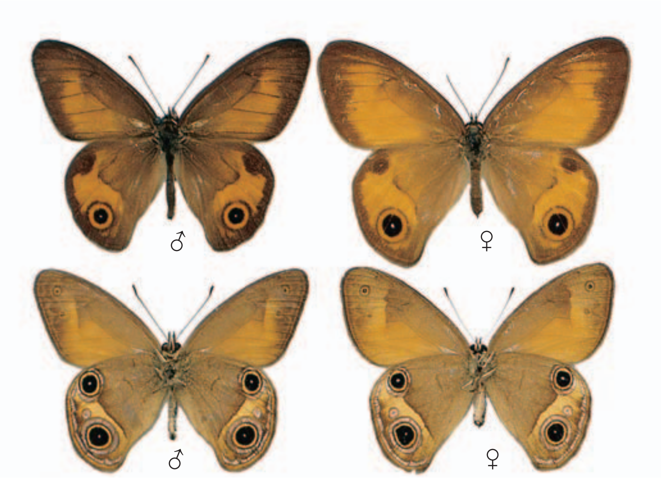


Other name: Common Ringlet. **Wingspan:** ♂ 31 mm, ♀ 31 mm. **Similar species:** Grey Ringlet, Orange-streaked Ringlet. The Brown Ringlet has the upperside colour darker brown, the HW upperside subtornal eyespot larger, the HW tornus more produced, and the HW upperside orange patch extending narrowly above the cell towards the base than in the Grey Ringlet. **Behaviour:** adults have a relatively slow and weak flight close to the ground; they frequently settle to bask, opening their wings towards the sun, and occasionally feed from flowers. Males regularly hilltop and perch on leaves close to the ground to establish territories. Probably several generations completed annually. Females breed throughout the year in n. QLD but adult abundance varies seasonally; adults more seasonal in cc. NSW where they fly from Sep to May. **Habitat:** tall open-forest and edges of tropical rainforest in wetter montane areas of n. QLD; tall open-forest and edges of subtropical and warm temperate rainforest in moist coastal lowland areas of s. QLD and c. and s. NSW; also coastal heath-woodland in s. NSW. **Status:** common and widespread. **Larval food plants:** Poaceae, including *Cynodon dactylon*, *Eriachne pallescens*, *Alexfloydia repens*; rarely *Gahnia clarkei*; possibly *Ottochloa gracillima*.

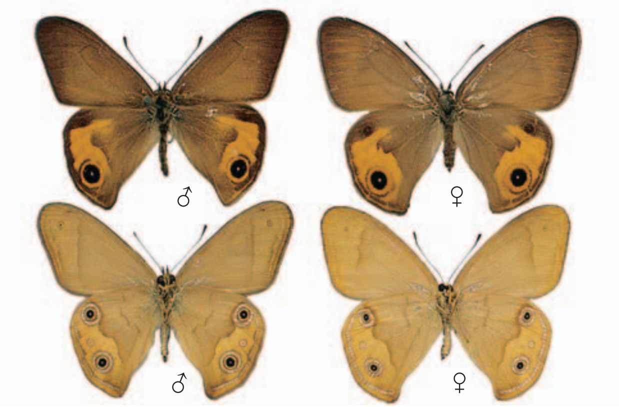
Grey Ringlet *Hypocysta pseudirius*



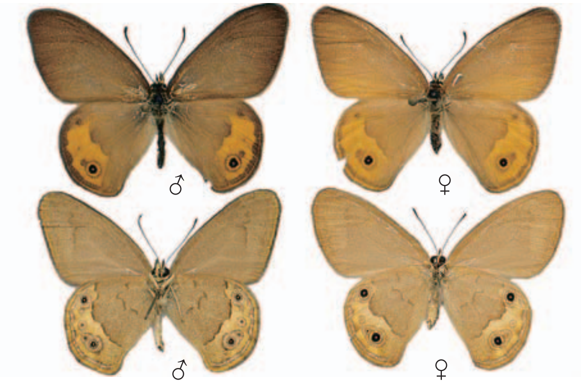
Other name: Dingy Ringlet. **Wingspan:** ♂ 30 mm, ♀ 31 mm. **Similar species:** Brown Ringlet, Orange-streaked Ringlet. The Grey Ringlet has the upperside colour paler grey, the HW upperside eyespot smaller, the HW tornus more rounded, additional silver spots on the HW underside, and the HW upperside orange patch enclosing the subtornal eyespot without the narrow extension above the cell towards the base compared to the Brown Ringlet. **Behaviour:** adults fly slowly close to the ground. Males hilltop and perch on leaves close to the ground to establish territories. Probably several generations completed annually, with adults more abundant in spring and autumn at Sydney. Breeding appears to occur throughout the year n. and c. QLD, even in the driest environments, with a possible decline in reproductive activity in the dry season. **Habitat:** monsoon forest (deciduous vine thicket) in n. QLD and brigalow scrub in s. QLD, mainly in lower rainfall areas. **Status:** common but very local. **Larval food plants:** Poaceae.



Orange-streaked Ringlet

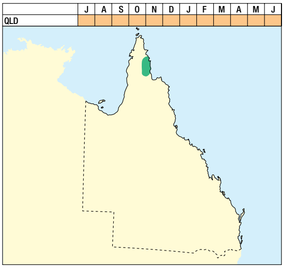


Brown Ringlet



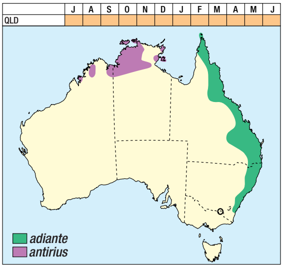
Grey Ringlet

Pied Ringlet *Hypocysta angustata*



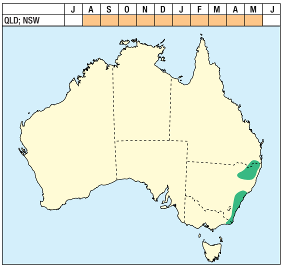
Other name: Black and White Ringlet. **Wingspan:** ♂ 32 mm, ♀ 33 mm. **Similar species:** none. The Pied Ringlet has black and white, rather than brown or orange, markings typical of other ringlets. **Behaviour:** adults fly close to the ground in the filtered light and shade. Males perch on leaves about 1 m above the ground to establish territories. Probably several generations completed annually, with adults on the wing throughout the year. **Habitat:** tropical rainforest, mainly in lowlands but up to 500 m in the McIlwraith Range, QLD, preferring sunlit edges and gaps where the larval food plant grows in the ground layer. **Status:** common but local and restricted to Cape York Peninsula, from Iron Range to near Coen and the Rocky River, QLD. **Larval food plants:** Poaceae.

Orange Ringlet *Hypocysta adiante*

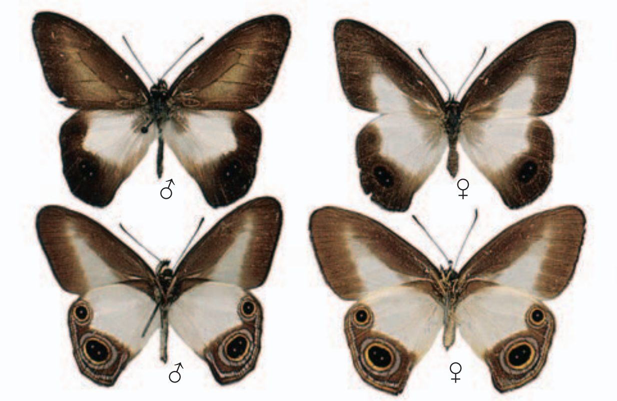


Other names: Darwin Ringlet, Dusky-bordered Ringlet. **Wingspan:** ♂ 28 mm, ♀ 32 mm. **Similar species:** none. The Orange Ringlet has the upperside colour orange with smoky-brown margins. **Variation:** two subspecies. **Behaviour:** adults fly with a rather weak flight close to the ground amongst grasses; they readily feed from flowers from a wide range of plants; flight activity peaks in the early afternoon in the late dry season. Several generations completed annually, with adults more abundant in spring and autumn near Sydney. Females breed continuously throughout the year in the tropics, even in very dry habitats, although reproduction declines as the dry season progresses. Populations appear to be sedentary, although local expansion of range likely to occur during the wet season when conditions become more favourable for breeding. **Habitat:** open-woodland, savannah woodland and eucalypt open-forest, preferring open grassy areas; usually limited to moister riparian habitats in the drier inland areas; also edges of monsoon forest and suburban gardens. **Status:** common and widespread; possibly extinct in VIC. **Larval food plants:** Poaceae, usually *Themeda triandra*.

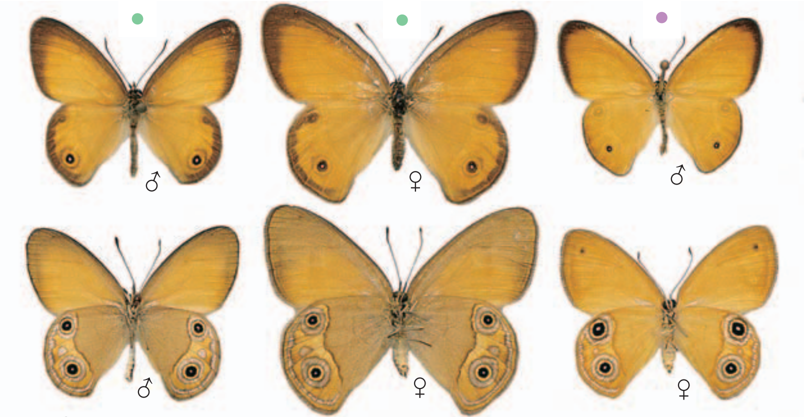
Rock Ringlet *Hypocysta euphemia*



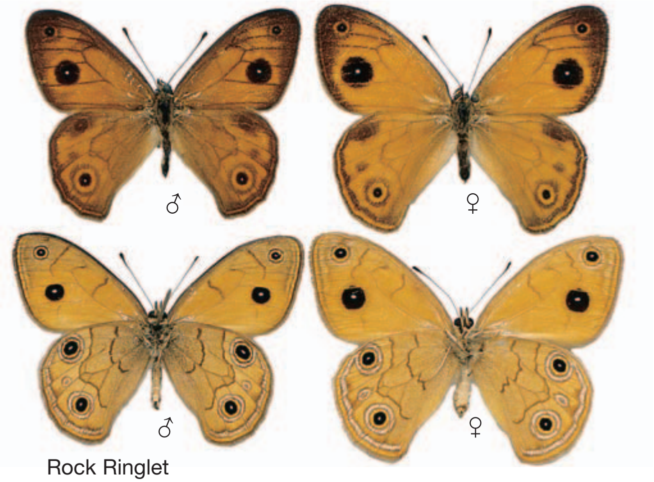
Wingspan: ♂ 36 mm, ♀ 37 mm. **Similar species:** none. The Rock Ringlet has a large black subterminal eyespot between veins CuA$_1$ and CuA$_2$ on the FW upperside. **Behaviour:** adults fly close to the ground in rocky areas; they often rest on the walls of rock faces or in small caves along cliffs of the Hawkesbury sandstone towards sunset. Apparently two generations annually near Sydney, although the flight period extends from Aug to May. **Habitat:** variety of habitats associated with rocky areas, especially the granite country above 600 m in se. QLD and n. NSW, and the sandstone belt of cc. NSW east of the Great Dividing Range. **Status:** common but local. **Larval food plants:** Poaceae.



Pied Ringlet

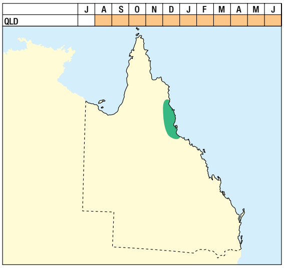


Orange Ringlet



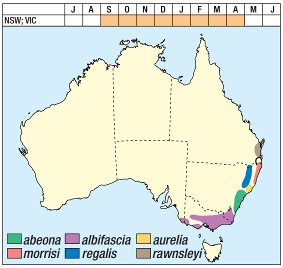
Rock Ringlet

Northern Sword-grass Brown *Tisiphone helena*

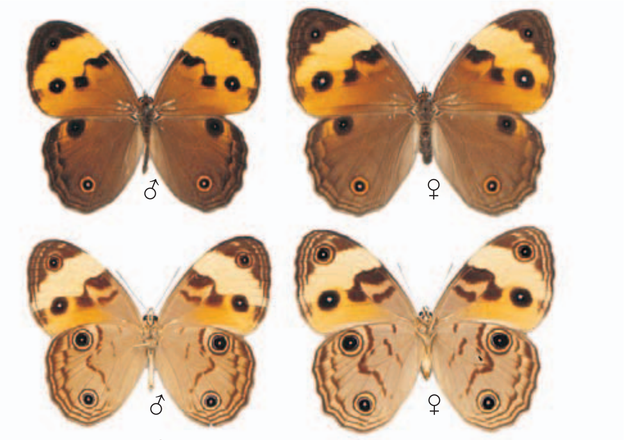


Other name: Helena Brown. **Wingspan:** ♂ 47 mm, ♀ 55 mm. **Similar species:** Bordered Rustic. The Northern Sword-grass Brown has two prominent eyespots on the underside of each wing. **Behaviour:** adults have a slow, erratic and graceful flight, and patrol areas close to the larval food plant within 1–2 m of the ground; if disturbed they fly much more rapidly; when settled on the ground the wings usually remain closed, revealing the cryptic underside pattern which blends well with the dry leaf litter. They are most active around midday in montane areas. Adults have been recorded during most months of the year, but are strongly seasonal in their time of appearance. In the Cardwell Range (700–800 m), QLD, there are two discrete flight periods, with the main flight period from Oct to Dec in the late dry season, followed by a partial second generation in Mar–Apr. In the Paluma Range near Townsville, QLD, there is only one generation annually, with adults emerging in Oct. **Habitat:** usually upland rainforest (up to 1200 m), preferring disturbed areas but with a moist, shady understorey, such as along edges and gaps in the forest where the larval food plant grows; also adjacent tall open-forest ecotone dominated by *Eucalyptus grandis* with *Syncarpia glomulifera*, and lowland rainforest with a swampy, shady understorey where the food plant grows near sea level. **Status:** common but local and restricted to the Wet Tropics, QLD. **Larval food plants:** usually *Gahnia sieberiana*, rarely *G. aspera*.

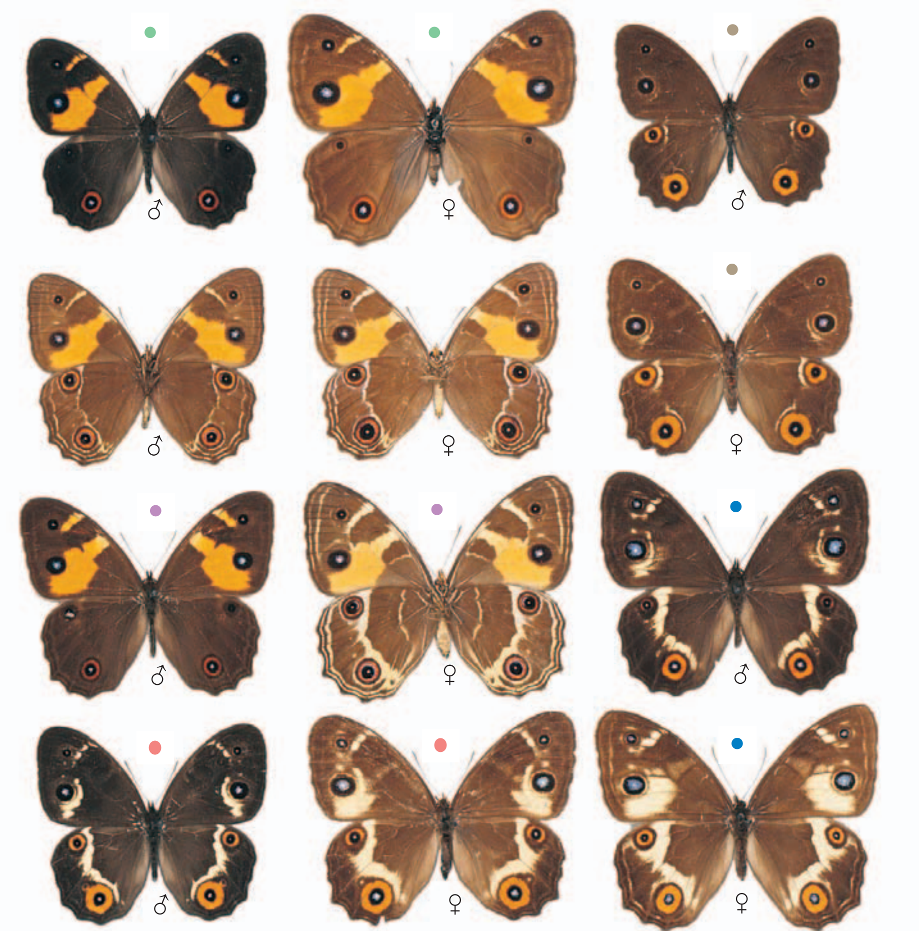
Varied Sword-grass Brown *Tisiphone abeona*



Other name: Sword-grass Brown. **Wingspan:** ♂ 52 mm, ♀ 59 mm. **Similar species:** Wonder Brown. Northern subspecies' of the Varied Sword-grass Brown (*T. a. morrisi*, *T. a. regalis*) have a cream band on the HW, and two large prominent blue-centred eyespots ringed with orange on the HW. **Variation:** six subspecies, involving complex geographical clines. **Behaviour:** adults fly with a slow but erratic, graceful flight within about 1 m of the ground; they fly mainly during sunshine; when overcast or during showers they settle on the larval food plant or nearby shrubs; they may also rest in small numbers in overhanging ledges near the food plant to roost for the night. Males actively hilltop during the morning, patrolling over rocks and low shrubs in the more open areas; they also patrol around clumps of the larval food plant in search of freshly emerged females. Two generations annually in coastal lowland areas of NSW, with adults on the wing mainly in Sep–Oct and again in Feb–Apr, although adults may be present during Nov–Jan depending on local conditions. One generation annually in montane areas of NSW and VIC, with adults flying from Dec to Feb. **Habitat:** wide variety of habitats, including lowland subtropical rainforest, tall open-forest, eucalypt open-forest, coastal heathland, paperbark woodland and swampland, and the ecotone bordering mangrove and coastal heathland both on the coast and tablelands (up to 1370 m), preferring creeks, gullies, sheltered slopes, edges of swamps and other moist areas where the larval food plants grow; rarely on the drier slopes inland of the Great Dividing Range. **Status:** common but local; some coastal populations threatened. **Larval food plants:** usually *Gahnia clarkei* in coastal ne. NSW and SA; *G. sieberiana* in se. NSW and VIC; also *G. aspera, G. erythrocarpa, G. grandis, G. melanocarpa, G. microstachya, G. radula, G. subaequiglumis*.

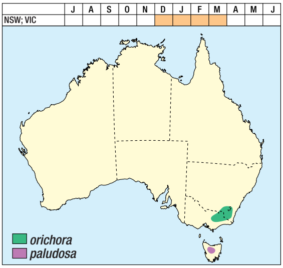


Northern Sword-grass Brown



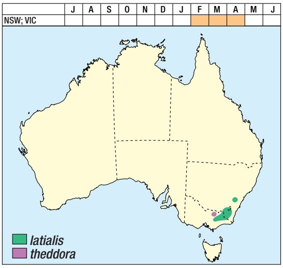
Varied Sword-grass Brown

Spotted Alpine Xenica *Oreixenica orichora*



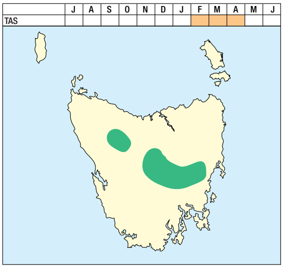
Other name: Orichora Brown. **Wingspan:** ♂ 30 mm, ♀ 31 mm. **Similar species:** Small Alpine Xenica, Ptunurra Xenica, Silver Xenica. The Spotted Alpine Xenica has the postmedian markings on the HW underside as dull white spots, rather than silvery-white crescent-shaped bands, and the FW underside subapical eyespot without a dark orange ring. **Variation:** two subspecies. **Behaviour:** adults fly within about 1 m of the ground in open sunny areas over grass tussocks and shrubs; they frequently settle to feed from flowers, especially Asteraceae; at dusk large numbers may cluster together amongst the vegetation to roost for the night. One generation annually, with adults emerging in late Dec and Jan on the mainland or from early Jan in TAS. **Habitat:** usually subalpine and alpine open-grassland, occasionally extending into subalpine woodland, between 1200 and 2100 m on the mainland, and between 760 and 1500 m on the central plateau in TAS. **Status:** very common but local. **Larval food plants:** usually *Poa fawcettiae* in VIC; also *P. hiemata*.

Small Alpine Xenica *Oreixenica latialis*

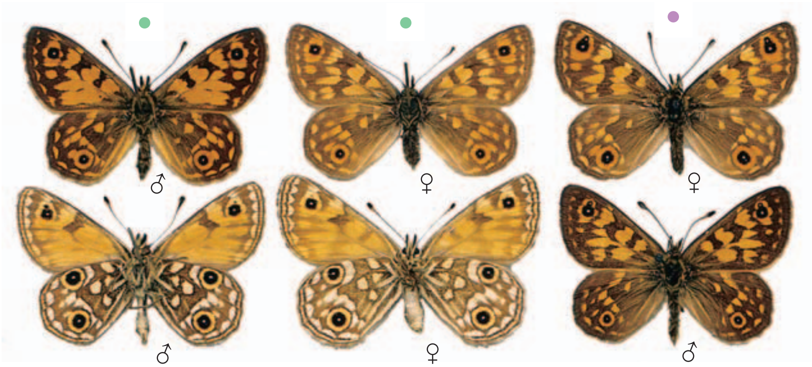


Other name: Alpine Silver Xenica. **Wingspan:** ♂ 29 mm, ♀ 29 mm. **Similar species:** Silver Xenica. Small Alpine Xenica males have the FW narrower, with the tornus distinctly rounded, and a single large basal spot on the HW upperside. **Variation:** two subspecies; *O. l. latialis* females have two ecological forms. **Behaviour:** adults fly during sunshine, very close to the ground in open areas over grass tussocks; when overcast they rest on low shrubs. Towards dusk they settle on grasses and shrubs in large clusters to roost for the night. One generation annually, with adults emerging from mid Feb, being most abundant in Mar. **Habitat:** alpine herbfield and grassland, up to 2100 m, sedgeland and acid bogs, including frost hollows below tree line, above 1000 m in c. and s. NSW and ACT and above 1200 m in highlands of ne. VIC; also edges of subalpine woodland. **Status:** very common but local and restricted to the tablelands and mountains of se. Australia. **Larval food plant:** *Poa hiemata* in VIC.

Ptunarra Xenica *Oreixenica ptunarra*



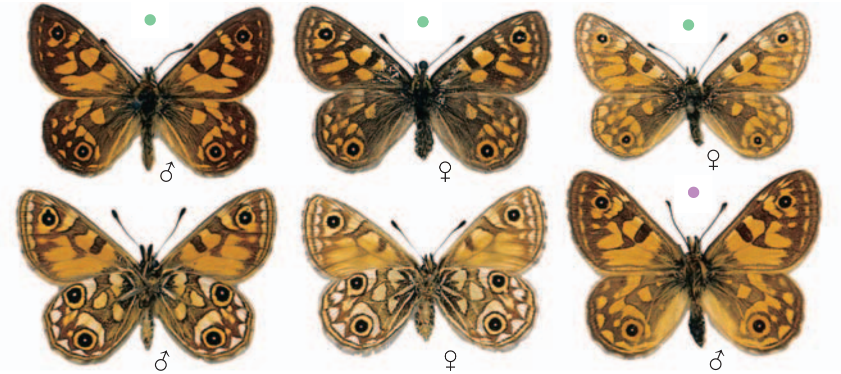
Other name: Ptunarra Brown. **Wingspan:** ♂ 28 mm, ♀ 28 mm. **Similar species:** Small Alpine Xenica. Ptunarra Xenica males have pale orange-yellow markings on the upperside. **Behaviour:** adults fly during sunshine, very close to the ground in open grassy areas with a direct and rapid flight; they often settle on the ground to bask with wings outspread; they are most active during the late morning; by mid afternoon they begin to settle together in sheltered spots among the long, dense grass to roost for the evening. One generation annually, with adults emerging from late Feb; flight period lasts only about two weeks and commences earlier in higher altitudes (above 750 m). **Habitat:** grassy open-woodland and tussock grassland in open plains and poorly drained areas bordering mountain lakes and swamps, where the larval food plants grow on the more fertile soils. **Status:** very common but local and restricted to TAS; vulnerable. **Larval food plants:** *Poa gunnii, P. labillardieri, P. rodwayi*; possibly *P. clelandii, P. hookeri, P. sieberiana*.



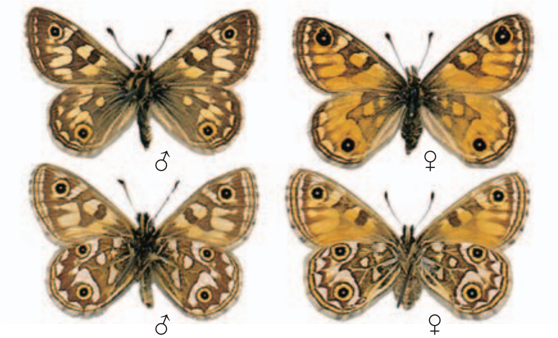
Spotted Alpine Xenica

female dark form

female pale form

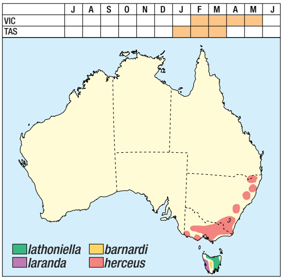


Small Alpine Xenica



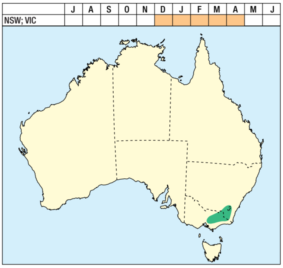
Ptunarra Xenica

Silver Xenica *Oreixenica lathoniella*



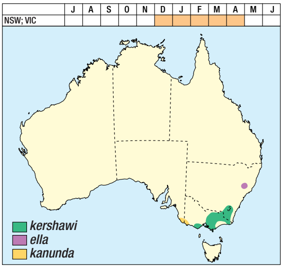
Other names: Dark Silver Xenica, Tasmanian Silver Xenica. **Wingspan:** ♂ 29 mm, ♀ 29 mm. **Similar species:** xenicas. The Silver Xenica has extensive bright silvery-white markings on the HW underside. Males of the mainland subspecies (*O. l. herceus*) have the FW broader with the tornus less rounded, and usually three basal spots on the HW upperside compared to the Small Alpine Xenica. **Variation:** four subspecies. **Behaviour:** adults fly close to the ground amongst grasses with a slow, weak flight; they readily feed from flowers, especially Asteraceae; towards late afternoon and dusk they form large, loose clusters in *Carex* swamps to roost for the night. One generation annually, with adults emerging from mid Jan in TAS or from mid Feb on the mainland; at the lower altitudes in VIC adults do not emerge until mid Mar. **Habitat:** eucalypt tall open-forest, open-forest and subalpine woodland with a predominantly grassy understorey, mainly in cooler higher rainfall areas in the mountains and tablelands of NSW and ACT, from sea level to 1760 m in VIC. **Status:** very common and widespread. **Larval food plants:** *Microlaena stipoides, Poa ensiformis, P. labillardieri*.

Orange Alpine Xenica *Oreixenica correae*

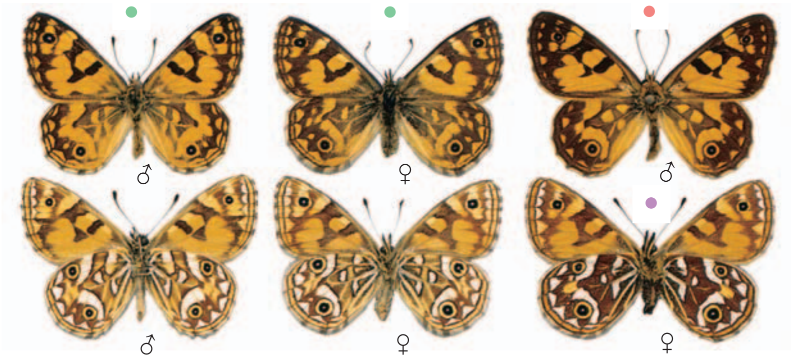


Other name: Correa Brown. **Wingspan:** ♂ 33 mm, ♀ 33 mm. **Similar species:** xenicas. Orange Alpine Xenica males have the silvery-white bands and spots on the HW underside replaced with orange. **Variation:** size, extent of brownish-orange markings, and underside markings vary geographically. **Behaviour:** adults fly in the understorey close to small shrubs, herbs and grasses with a slow, weak flight; they readily feed from flowers of Asteraceae; towards evening they roost in large clusters at particular sites. One generation annually, with adults emerging from late Dec, being most abundant in Jan–Feb. **Habitat:** subalpine eucalypt woodland, between 1200 and 1800 m in ACT, preferring the denser shady vegetation. Adults occasionally occur in open-grasslands to feed from of flowers but do not breed in these habitats. **Status:** very common but restricted to the highlands of se. Australia. **Larval food plants:** usually *Poa ensiformis* in VIC; occasionally *P. hiemata*.

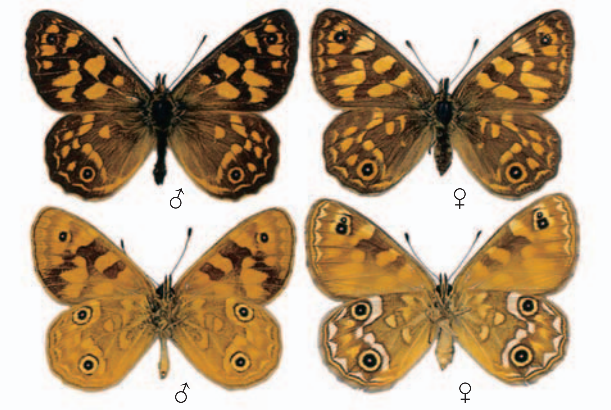
Striped Xenica *Oreixenica kershawi*



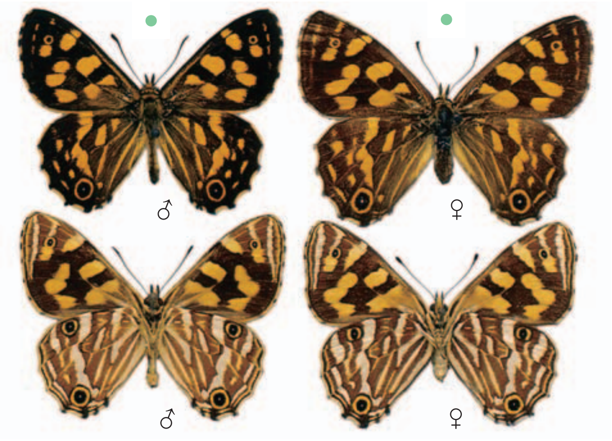
Other names: Kershaw's Brown, Kershaw's Xenica. **Wingspan:** ♂ 33 mm, ♀ 34 mm. **Similar species:** xenicas. The Striped Xenica has the HW more elongated, and a conspicuous silvery-white postmedian band on the HW underside. **Variation:** three subspecies. **Behaviour:** adults frequent sunlit patches within shady areas in the understorey; they fly about 1 m above the ground with a rather slow and weak flight, and frequently settle on grasses and low shrubs to bask with wings half opened; towards dusk large numbers aggregate on grass tussocks to roost for the night. One generation annually, with adults emerging from Dec or early Jan, being more abundant in Jan–Feb. **Habitat:** usually eucalypt open-forest and tall open-forest in montane areas, preferring cool, wet areas with a lush understorey of ferns and grasses; extends into subalpine woodland (up to 1300 m) and down to near sea level via corridors of riparian open-forest; also coastal paperbark swamps in sw. VIC. **Status:** very common and widespread; vulnerable in SA. **Larval food plants:** *Poa* in ACT; *Tetrarrhena juncea* in VIC.



Silver Xenica



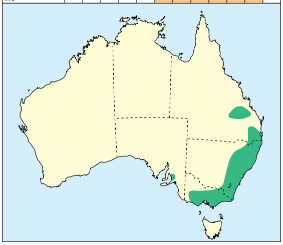
Orange Alpine Xenica



Striped Xenica

Ringed Xenica *Geitoneura acantha*

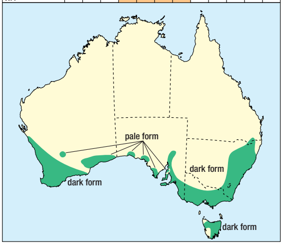
	J	A	S	O	N	D	J	F	M	A	M	J
QLD				🟧	🟧	🟧	🟧	🟧	🟧	🟧		
VIC						🟧	🟧	🟧	🟧	🟧	🟧	



Other names: Eastern Ringed Xenica, Southern Ringed Xenica. **Wingspan:** ♂ 39 mm, ♀ 44 mm. **Similar species:** none. The Ringed Xenica has bright orange markings on the upperside, and two prominent eyespots on the HW underside. **Behaviour:** adults have a slow, jerky flight close to ground amongst grasses and frequent sunlit patches in shady areas. One generation annually, with males emerging about 3.5 weeks before females; males are most abundant in Jan–Feb in VIC, but females rest in cooler shaded areas such as among dense vegetation in gullies and crevices along creek banks during the driest and hottest period of the season, they do not become more active until late Feb–Mar. **Habitat:** eucalypt open-forest and woodland with a grassy understorey in the foothills of and near the Great Dividing Range, preferring damp shady gullies, moist sheltered slopes and riparian open-forest where the larval food plants grow. **Status:** common but local; uncommon in SA. **Larval food plants:** usually *Microlaena stipoides, Poa sieberiana, P. tenera*; also *Themeda triandra*.

Marbled Xenica *Geitoneura klugii*

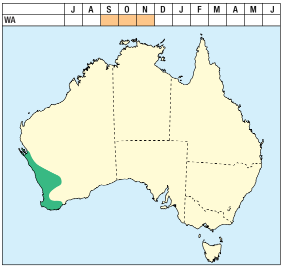
	J	A	S	O	N	D	J	F	M	A	M	J
VIC (c)						🟧	🟧	🟧	🟧	🟧		
WA				🟧	🟧	🟧	🟧					



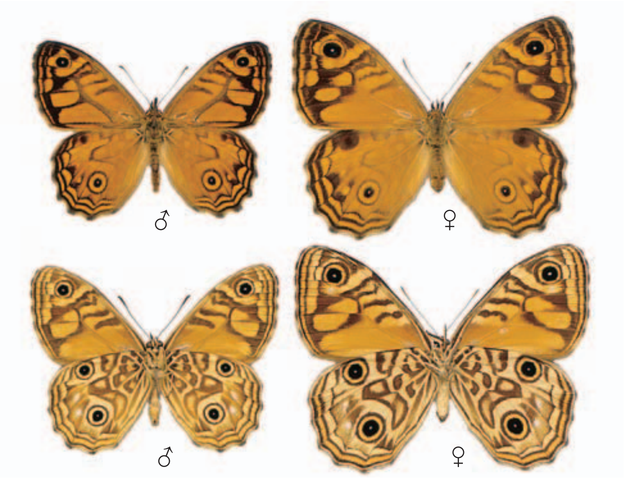
Other name: Klug's Xenica. **Wingspan:** ♂ 39 mm, ♀ 42 mm. **Similar species:** Western Xenica. **Variation:** two geographical forms. **Behaviour:** adults have a relatively slow and jerky flight, close to the ground within about 1 m; they frequently settle, with wings closed, on the ground in cleared patches, amongst dead leaf litter and on rocks. Males strongly hilltop and establish territories by perching in selected areas on the ground. One generation annually, with adults most abundant during late spring in semi-arid areas or during Jan and Feb near Melbourne and TAS. **Habitat:** eucalypt open-forest and woodland with a grassy understorey on the coast and foothills of and near the Great Dividing Range in the south-east, preferring the more open sunlit areas; extends into subalpine woodland (up to 1400 m); also open grassy areas in sand-dune shrubland and mallee open-scrub in the semi-arid zone. **Status:** very common and widespread. **Larval food plants:** *Joycea pallida, Poa morrisii, P. labillardieri* in VIC; *Poa tenera, Themeda triandra, *Brachypodium distachyon, *Vulpia* in SA; *Austrostipa flavescens, *Ehrharta calycina* in WA.

Western Xenica *Geitoneura minyas*

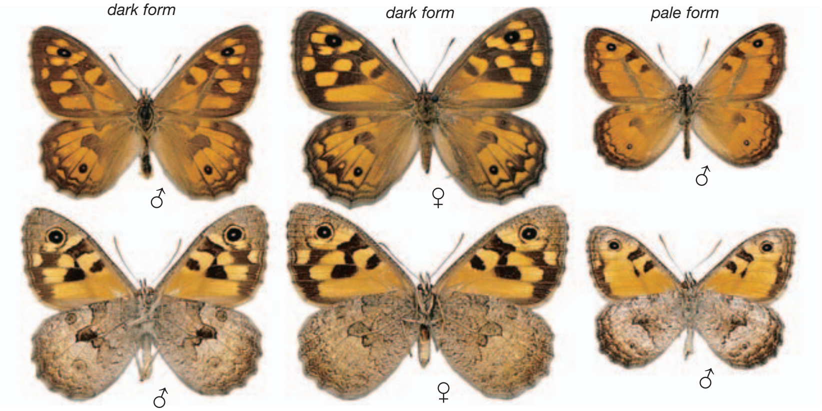
	J	A	S	O	N	D	J	F	M	A	M	J
WA			🟧	🟧	🟧							



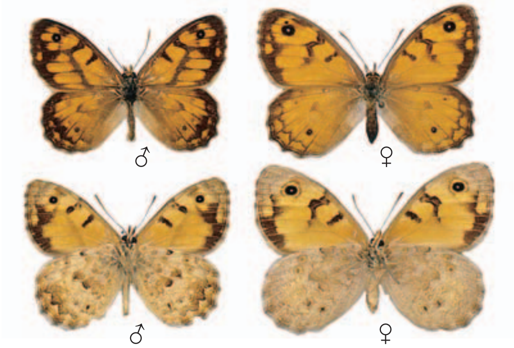
Wingspan: ♂ 32 mm, ♀ 36 mm. **Similar species:** Marbled Xenica. The Western Xenica has the FW termen more rounded, the FW upperside black markings less extensive without the black margin along the dorsum and the black band along vein CuA_2 between the cell and the termen, and has four obscure eyespots on the HW underside, two near the apex and two near the tornus. **Variation:** size and extent of upperside orange markings vary geographically. **Behaviour:** adults fly slowly, close to the ground within about 1 m, and frequently settle on the ground in cleared patches or amongst dead leaf litter; when settled the wings remain closed and are well camouflaged amongst the leaf litter and debris. One generation annually, with adults emerging in spring, about four weeks before the Marbled Xenica. **Habitat:** eucalypt woodland in the moister coastal areas; also acacia woodland in semi-arid areas, preferring low-lying grassy places. **Status:** common and widespread. **Larval food plants:** Poaceae, including **Ehrharta*.



Ringed Xenica

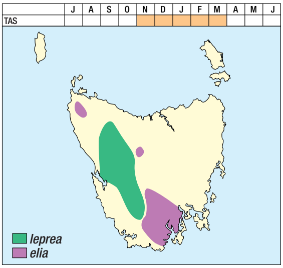


Marbled Xenica



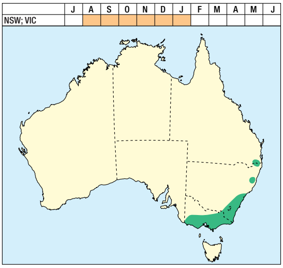
Western Xenica

Tasmanian Xenica *Nesoxenica leprea*



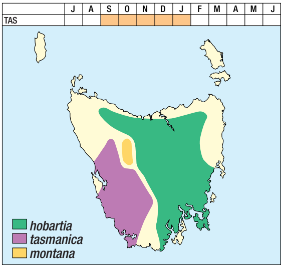
Other names: Delicate Xenica, Leprea Brown, Elia Brown. **Wingspan:** ♂ 31 mm, ♀ 31 mm. **Similar species:** none. The Tasmanian Xenica has black and cream or rich yellow markings on the upperside. **Variation:** two subspecies, with intermediate forms. **Behaviour:** adults are most active around midday; during the morning they fly close to the ground, but later in the day higher around the tops of trees. Probably only one generation annually, with adults emerging from late Dec at Mount Wellington, TAS. **Habitat:** usually cool temperate beech forest, from near sea level to 1240 m, preferring the more open sunlit areas in the understorey, such as clearings, along creeks or edges of the forest where the larval food plant grows in greater density as a small, fine-leaved sedge; also pencil pine forest at higher altitudes. Adults occasionally occur in adjacent mixed wet eucalypt forest or tea-tree swamps but do not breed in these habitats. **Status:** common but local and restricted to w. TAS. **Larval food plant:** *Uncinia tenella*.

Forest Brown *Argynnina cyrila*

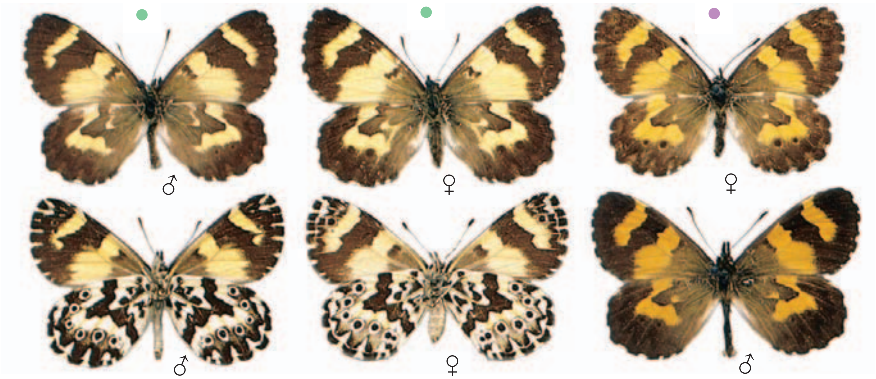


Other name: Cyril's Brown. **Wingspan:** ♂ 35 mm, ♀ 35 mm. **Similar species:** Tasmanian Brown. Forest Brown males have a large black sex-brand on the FW, not present in Tasmanian Brown males. **Behaviour:** adults fly rapidly and erratically. Males are more active in the afternoon and frequently fly high at the tops of treeferns and eucalypts; they regularly hilltop and establish territories around the tops of trees up to 6 m or more from the ground. Females often found flying very close to the ground over grasses and leaf litter in sunlit patches. One generation annually, with adults flying from late Aug to Oct in coastal areas or from Sept–Oct to Dec–Jan in montane areas. **Habitat:** wetter eucalypt tall open-forests and edges of cool and warm temperate rainforest in coastal lowlands and on the tablelands and mountains of and near the Great Dividing Range, up to 1200 m in ACT and 1580 m in n. NSW; also drier eucalypt open-forests, preferring moist gullies and slopes. **Status:** common and widespread. **Larval food plants:** Poaceae, including *Poa*; possibly *Tetrarrhena*.

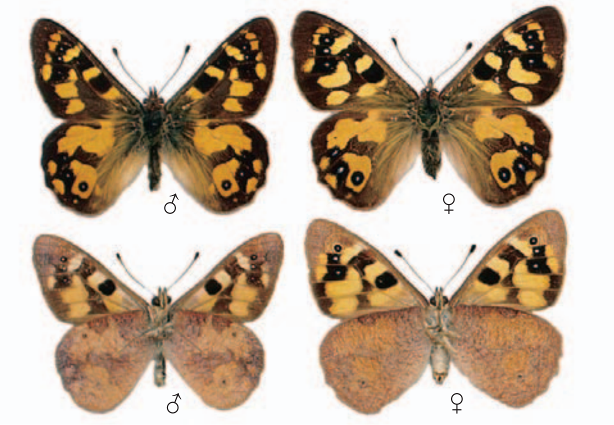
Tasmanian Brown *Argynnina hobartia*



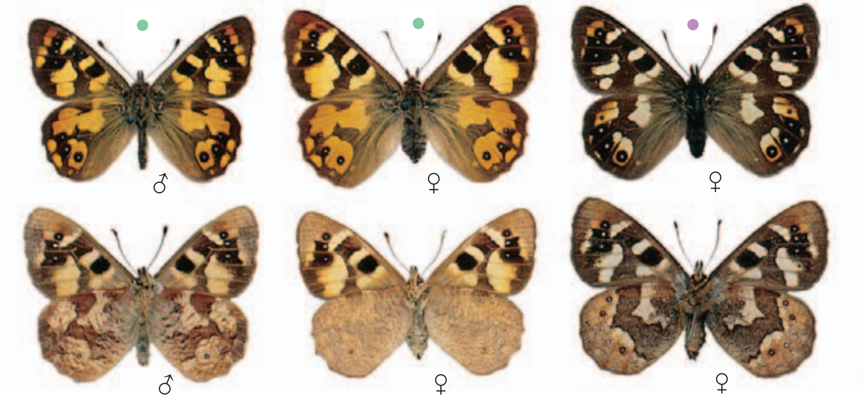
Other name: Hobart Brown. **Wingspan:** ♂ 32 mm, ♀ 33 mm. **Similar species:** Forest Brown. **Variation:** three subspecies, with intermediate forms. **Behaviour:** adults fly during sunshine, in the understorey within 2 m of the ground; they frequently settle to bask with wings opened facing the sun; they are most active during late morning and around midday. Females flutter slowly very close to ground over grasses. One generation annually, with adults flying from late Sep to early Nov near Hobart, or from Dec to early Jan in w. TAS above 900 m. **Habitat:** wide variety of habitats, including eucalypt open-forest, woodland and margins of grassland and heath-sedgeland, preferring an open canopy with sparse understorey of small shrubs and young trees and a dense, tall ground cover of native grasses, from sea level to 1050 m; also 'button-grass' plains on acid bogs associated with patches of rainforest in high rainfall areas of w. TAS. **Status:** common but restricted to TAS. **Larval food plants:** Poaceae, including **Lolium perenne*; possibly *Poa labillardieri, Austrodanthonia*.



Tasmanian Xenica

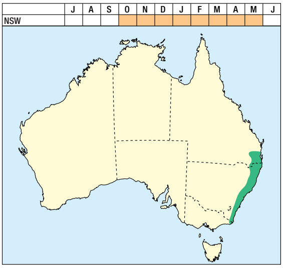


Forest Brown



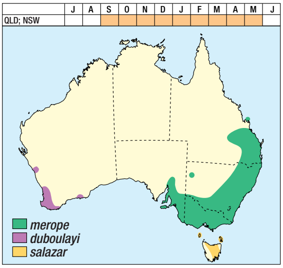
Tasmanian Brown

Wonder Brown *Heteronympha mirifica*



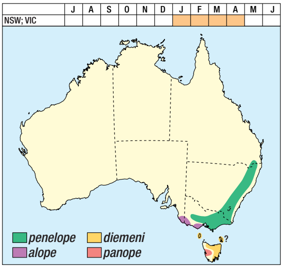
Wingspan: ♂ 53 mm, ♀ 61 mm. **Similar species:** Common Brown, Varied Sword-grass Brown. Wonder Brown females have the FW cream band broader, and the HW subtornal eyespot smaller without the blue centre compared to northern subspecies' of the Varied Sword-grass Brown (*Tisiphone abeona morrisi*, *T. a. regalis*). **Behaviour:** males fly high and perch 6–7 m above the ground on foliage of trees overhanging gullies in more open sunlit areas to establish territories. Females aestivate during summer, resting in shade amongst dry leaf litter in rainforest, especially along moist gullies. One generation annually, with males flying from Oct to late Jan–early Feb, females more active in Mar–Apr. **Habitat:** edges of subtropical and warm temperate rainforest and adjacent eucalypt tall open-forest on the coast and tablelands, up to 1400 m in s. QLD and n. and c. NSW but mainly in coastal lowlands in s. NSW, where the *Oplismenus* food plant commonly grows as a soft, dense, prostrate grass. **Status:** common but local. **Larval food plants:** Poaceae, including *Oplismenus* in cc. NSW; rarely *Gahnia clarkei*.

Common Brown *Heteronympha merope*

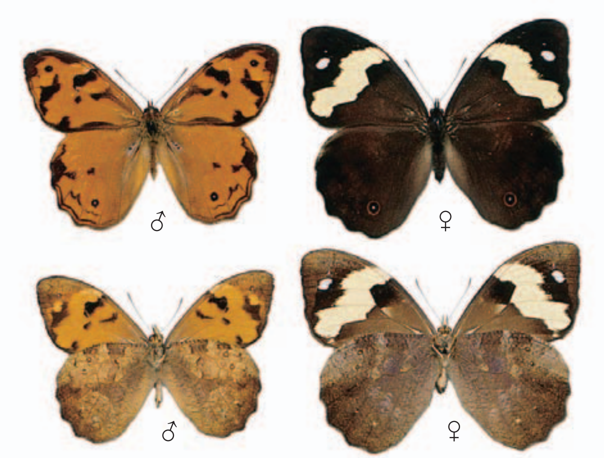


Other name: Western Brown. **Wingspan:** ♂ 56 mm, ♀ 64 mm. **Similar species:** Wonder Brown, Shouldered Brown. Common Brown males have the upperside brownish-orange areas duller and less extensive, and the FW sex-brand more extensive than in Wonder Brown males. **Variation:** three subspecies. **Behaviour:** males fly slowly close to the ground over grasses early in the season; later they fly higher, patrolling the mid to upper canopy with a faster erratic flight and commonly hilltop. Females aestivate during summer, resting in small aggregations in cool, shady places. One generation annually, with males flying in spring and summer; females more active in autumn. **Habitat:** wide variety of habitats, but especially grassy woodland and dry eucalypt open-forest with a grassy understorey, in coastal foothills and inland slopes of the Great Dividing Range in se. Australia, from sea level to 1250 m; eucalypt woodland along banks of rivers in semi-arid zone; also suburban gardens. **Status:** very common and widespread. **Larval food plants:** *Cynodon dactylon, Microlaena stipoides, Poa poiformis, P. tenera, Themeda triandra, *Brachypodium distachyon, *Bromus cathartiens, *Ehrharta erecta.*

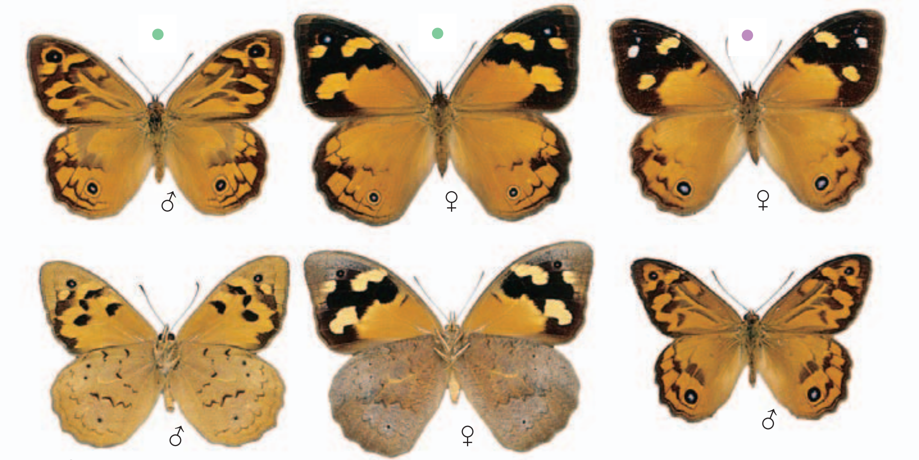
Shouldered Brown *Heteronympha penelope*



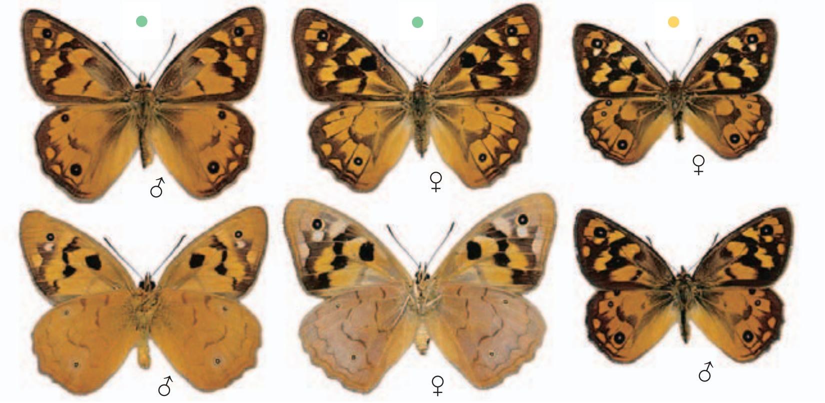
Wingspan: ♂ 54 mm, ♀ 56 mm. **Similar species:** Common Brown, Spotted Brown. Shouldered Brown males have the sex-brand comprising a single large 'shoulder' in the FW cell compared to Common Brown males. **Variation:** four subspecies. **Behaviour:** males fly rapidly close to the ground, or perch on leaves of trees in the lower to mid canopy to establish territories; they regularly hilltop. Females usually fly closer to ground over grasses in more open areas. One generation annually, with adults most abundant in Feb and early Mar. **Habitat:** wide variety of habitats, but particularly lowland grassy woodland, drier eucalypt open-forests with a grassy understorey and subalpine woodland, from sea level to 1200 m in TAS and to 1600 m on the mainland, mainly in montane areas of the Great Dividing Range and adjacent ranges in se. QLD, NSW and ACT. **Status:** very common and widespread. **Larval food plants:** *Poa* in ACT; *Austrodanthonia penicillata, A. pilosa, Themeda triandra* in VIC.



Wonder Brown

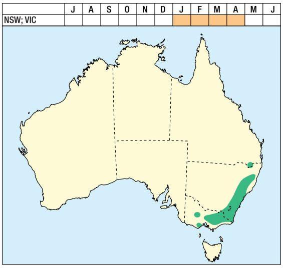


Common Brown



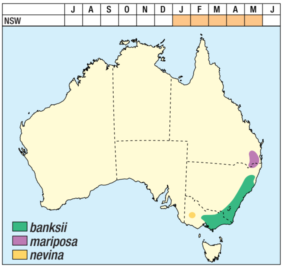
Shouldered Brown

Spotted Brown *Heteronympha paradelpha*



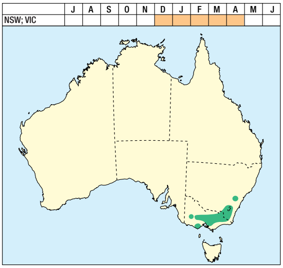
Wingspan: ♂ 43 mm, ♀ 46 mm. **Similar species:** Shouldered Brown, Banks' Brown, Solander's Brown. Spotted Brown females have the HW termen more rounded than in Shouldered Brown females. Males have the FW sex-brand broader compared to Banks' and Solander's browns. **Behaviour:** adults fly with an erratic, fluttering flight. Males patrol close to the ground over grasses in the morning, but fly higher and perch for long periods on foliage about 4 m above the ground during the afternoon. Females more often seen during the afternoon flying near the larval food plants. One generation annually, with adults most abundant from Jan or Feb to Mar. **Habitat:** wetter eucalypt open-forests and tall open-forests in the foothills, mountains and tablelands of and near the Great Dividing Range, up to 1500 m, preferring moist gullies and damp places adjacent to creeks where ferns and the larval food plants grow in slightly open, shady areas with filtered sunlight in the understorey. **Status:** common but local. **Larval food plants:** *Microlaena stipoides, Poa tenera.*

Banks' Brown *Heteronympha banksii*

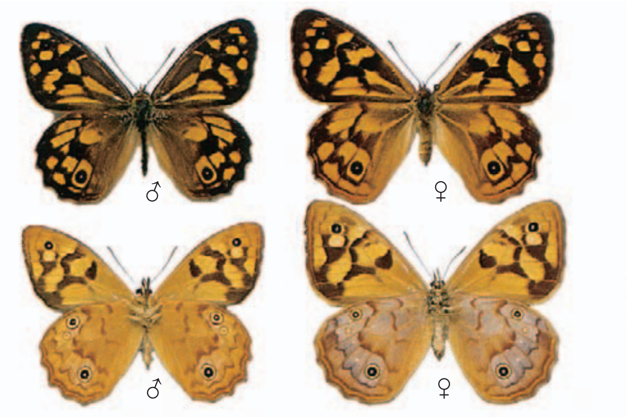


Wingspan: ♂ 48 mm, ♀ 48 mm. **Similar species:** Solander's Brown, Spotted Brown. Banks' Brown has the HW termen strongly crenulate, and only one subapical eyespot on the HW underside. **Variation:** three subspecies. **Behaviour:** adults fly rapidly in short bursts in the understorey then settle on the ground or on low shrubs. Males frequently perch on shrubs, especially fronds of treeferns, in sunlit patches several metres above the ground to establish territories. One generation annually, with adults flying mainly from Feb or Mar to Apr; most abundant in Mar in VIC. **Habitat:** usually tall open-forest in montane areas on the tablelands and mountains of and near the Great Dividing Range, up to 900 m, where the larval food plants grow in the cool, moist and dense understorey; also cool temperate and warm temperate rainforest; occasionally in coastal areas of c. and s. NSW and e. VIC. **Status:** common and widespread. **Larval food plants:** usually Poaceae, including *Poa tenera*, possibly *Tetrarrhena juncea* in VIC; very occasionally *Carex longebrachiata, Gahnia melanocarpa.*

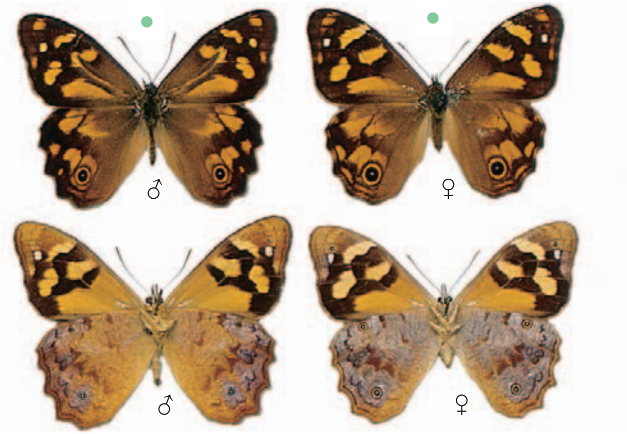
Solander's Brown *Heteronympha solandri*



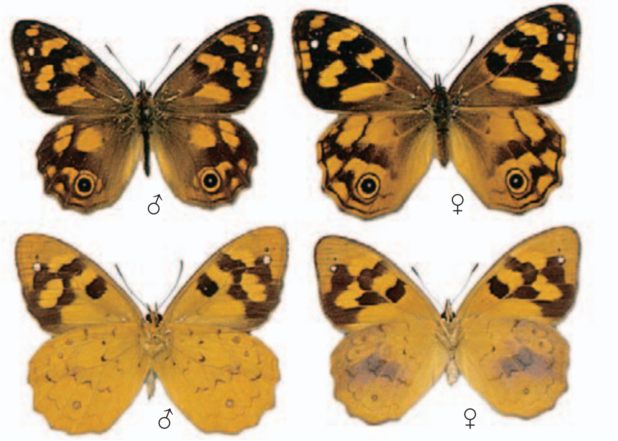
Wingspan: ♂ 48 mm, ♀ 48 mm. **Similar species:** Banks' Brown. Males of Solander's Brown have the FW narrower, with the subterminal spot usually white, and the FW sex-brand shorter. **Behaviour:** adults have a very fast and erratic flight. Males usually fly within a few metres of the ground, frequently settling on low shrubs in sunlit patches to feed from flowers or to bask; they also fly and perch higher in the canopy. Females fly closer to the ground and more active in the afternoon. One generation annually, with adults most abundant during Jan and Feb. **Habitat:** usually subalpine woodland and eucalypt open-forest with a grassy understorey in the mountains and ranges of the south-eastern highlands, from 840 m to about 1600 m in s. NSW and ACT, mainly above 1000 m in VIC, but above 320 m in w. VIC; also tall open-forest along streams close to elevated ranges. **Status:** common and widespread. **Larval food plants:** Poaceae, including *Poa*, possibly *Poa labillardieri, Tetrarrhena* in VIC.



Spotted Brown

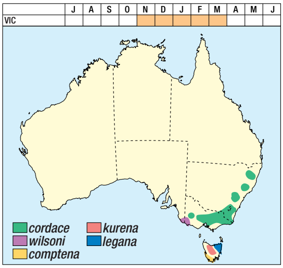


Banks' Brown



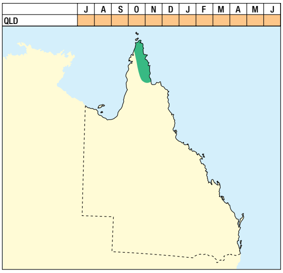
Solander's Brown

Bright-eyed Brown *Heteronympha cordace*



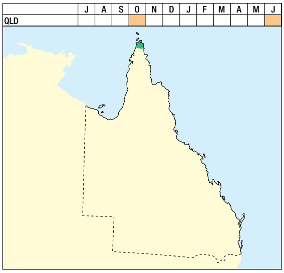
Wingspan: ♂ 38 mm, ♀ 42 mm. **Similar species:** browns. The Bright-eyed Brown has the termen of the wings more rounded, and prominent blue-centred eyespots on the HW compared to other browns. **Variation:** five subspecies; *H. c. cordace* varies geographically in extent of upperside orange markings. **Behaviour:** adults have a slow, meandering flight close to the ground amongst clumps of the larval food plant; they may feed from the flowers of *Melaleuca* and *Leptospermum*. One generation annually, with adults on the wing mainly during summer. **Habitat:** sedgeland in swamps and along creeks, usually with a sparse cover of paperbark and tea-tree shrubs, in the tablelands and mountains of NSW and ACT, from 600 m to 1800 m, but usually above about 900 m, in coastal lowlands and mountains of the Great Dividing Range in VIC, and from sea level to 1000 m in TAS, where dense stands of the larval food plant grow. **Status:** common but very local; subspecies *H. c. wilsoni* critically endangered. **Larval food plants:** *Carex appressa*; possibly *C. gaudichaudiana* in VIC.

Palmfly *Elymnias agondas*

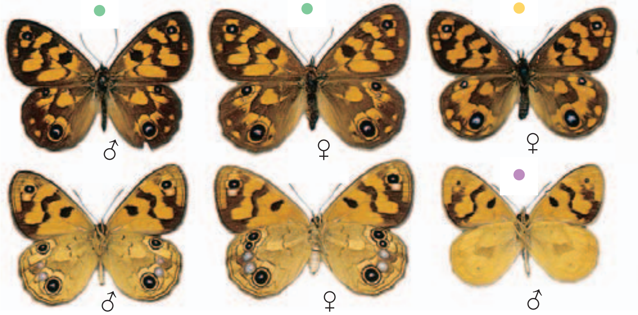


Other name: Australian Palmfly. **Wingspan:** ♂ 60 mm, ♀ 61 mm. **Similar species:** crows. The Palmfly has a series of prominent black eyespots on the HW underside. **Behaviour:** adults have a slow, graceful flight, similar to that of species of owls, but if disturbed they may fly faster and more erratically; males commonly fly around and perch on the fronds of palms in dark shade to establish territories. Probably several generations completed annually. **Habitat:** tropical rainforest, where the larval food plant grows. **Status:** uncommon, local and restricted to Cape York Peninsula, from Cape York to the Rocky River, QLD. **Larval food plant:** *Calamus carytoides*.

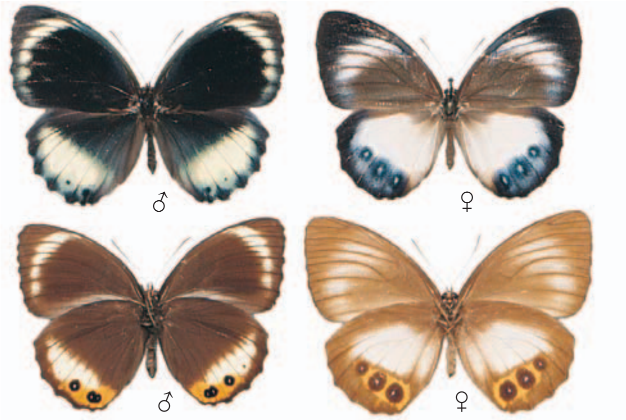
Pearl Owl *Taenaris artemis*



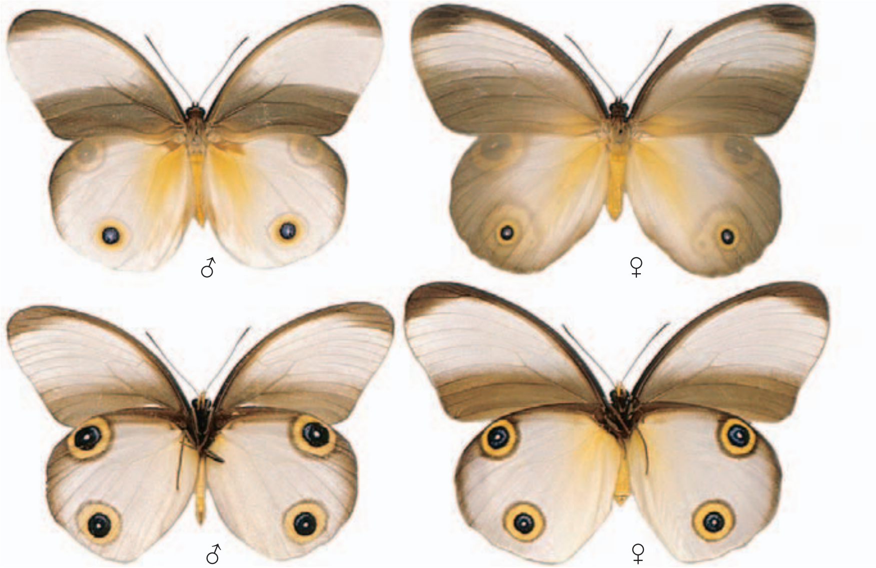
Other names: Cape York Owl, Artemis Owl. **Wingspan:** ♂ 87 mm, ♀ 95 mm. **Similar species:** Orchard Swallowtail. The Pearl Owl has two large, conspicuous eyespots on the HW underside compared to females of the Orchard Swallowtail 'pale form'. **Behaviour:** adults have a fairly direct flight, usually well above the ground; they fly in sunlit patches and often settle on the upperside of leaves to rest, with wings closed, where they may be difficult to see. Number of generations completed annually not recorded. **Habitat:** lowland rainforest with a swampy understorey dominated by the larval food plant. **Status:** uncommon, local and restricted to the Torres Strait islands and northern Cape York Peninsula, QLD; rare on the Australian mainland, known with certainty from only two females: one near Lockerbie and the other at Bamaga. **Larval food plant:** *Pandanus* in Torres Strait.



Bright-eyed Brown

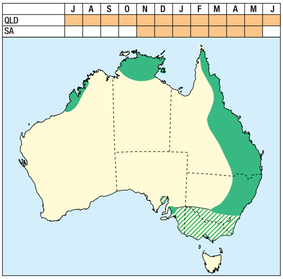


Palmfly



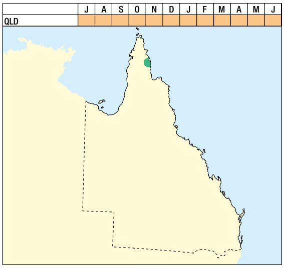
Pearl Owl

Tailed Emperor *Polyura sempronius*



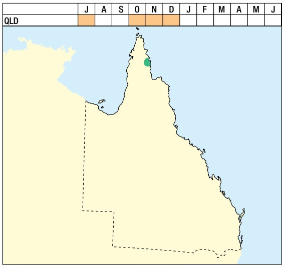
Wingspan: ♂ 75 mm, ♀ 85 mm. **Similar species:** none. The Tailed Emperor has the upperside colour cream, with pointed tails on the HW. **Behaviour:** adults have a fast and powerful flight; they are readily attracted to fermenting juices of rotting fruit and sap exuding from the trunks of shrubs and trees. Males commonly fly on hilltops and establish territories by perching on leaves, branches or trunks of trees about 3 m or more above the ground; when settled they face an open area, with head directed downwards and wings closed or slightly opened, moving the HWs alternately up and down. Two or more generations annually, with adults more often seen during the dry season, from May to Nov in NT. Irregular in appearance in s. NSW and VIC where populations are not permanently established. **Habitat:** wide variety of habitats; also suburban areas where the native and introduced larval food plants are frequently grown as ornamental trees. **Status:** uncommon but widespread. **Larval food plants:** usually legumes (Mimosaceae, Caesalpiniaceae); also many other families, including Sterculiaceae (*Brachychiton*), Ulmaceae (*Celtis*).

Orange Emperor *Charaxes latona*

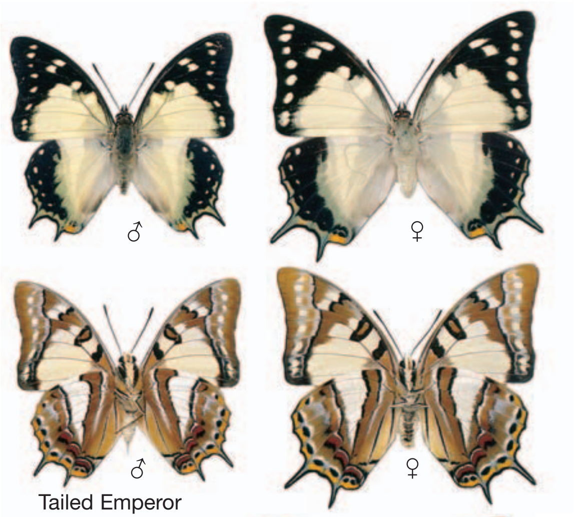


Wingspan: ♂ 70 mm, ♀ 80 mm. **Similar species:** Cruiser. The Orange Emperor has the termen of the FW strongly concave, and two tails on the HW. **Behaviour:** adults fly rapidly and are conspicuous on the wing. Males establish territories by perching on leaves, branches or tree trunks about 6 m or more above the ground, with head oriented downwards and wings held closed over the body; they frequent hilltops. Females are usually observed flying in clearings or along edges of the forest, such as streams and roads. Probably several generations completed annually. **Habitat:** tropical rainforest, where the larval food plant grows. **Status:** uncommon and restricted to Iron Range on Cape York Peninsula, QLD. **Larval food plant:** *Cryptocarya triplinervis*.

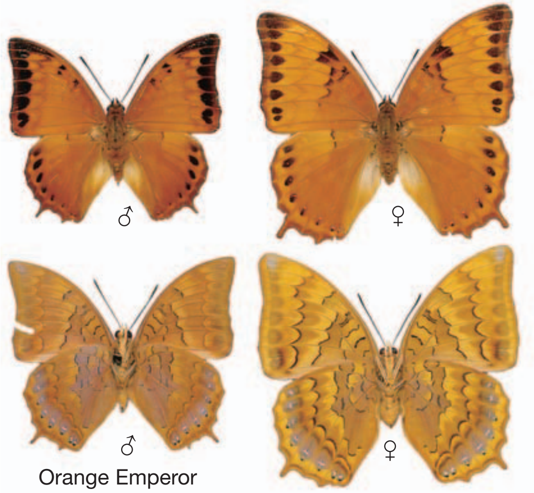
Turquoise Emperor *Apaturina erminea*



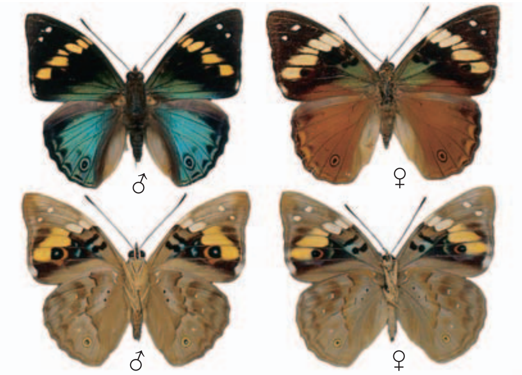
Other name: New Guinea Emperor. **Wingspan:** ♂ 74 mm, ♀ 72 mm. **Similar species:** none. Turquoise Emperor males have striking iridescent green-blue areas on the upperside. **Behaviour:** adults are attracted to sap-flows and fermenting juices of rotting fruits. Males have a very fast flight and settle for long periods on tree trunks, up to 7 m or more from the ground, resting head downwards with wings closed above the body, usually along tracks or edges of the forest. **Habitat:** adults have been collected in lowland tropical rainforest. **Status:** rare and restricted to Iron Range on Cape York Peninsula, QLD. **Larval food plant:** not recorded. Possibly *Celtis*.



Tailed Emperor

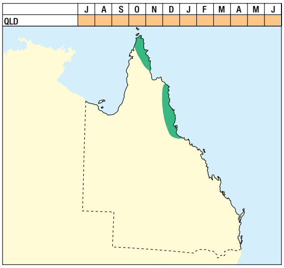


Orange Emperor



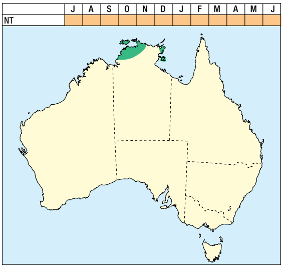
Turquoise Emperor

Red Lacewing *Cethosia cydippe*



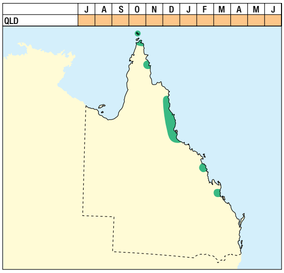
Wingspan: ♂ 78 mm, ♀ 78 mm. **Similar species:** Orange Lacewing. The Red Lacewing has the upperside colour brilliant crimson, rather than orange or orange-brown, compared to the Orange Lacewing. **Behaviour:** adults have a slow, gliding flight; they settle with wings outspread on leaves in an open sunny spot a few metres above the ground, revealing the striking upperside crimson colours; they feed at *Lantana* and other flowers. Probably several generations completed annually. **Habitat:** edges of lowland rainforest and gallery forest, where the usual larval food plant grows as a large hanging vine from the canopy. **Status:** common but local. **Larval food plants:** usually *Adenia heterophylla*; occasionally *Hollrungia*.

Orange Lacewing *Cethosia penthesilea*

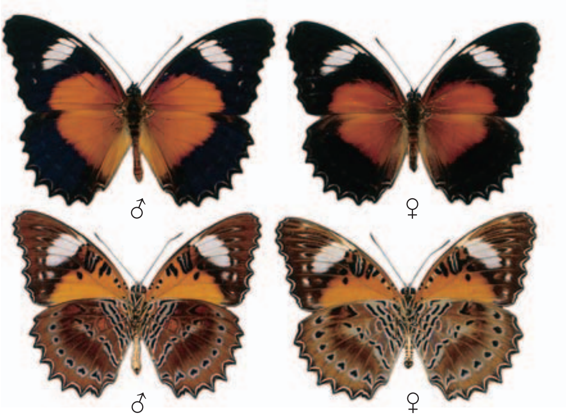


Wingspan: ♂ 65 mm, ♀ 67 mm. **Similar species:** Red Lacewing, Lesser Wanderer, Orange Tiger, Danaid Eggfly. The Orange Lacewing has conspicuous white markings on the underside, and the HW termen crenulated. **Behaviour:** adults fly in sunlit gaps in the forest and frequently settle on leaves. Probably several generations completed annually, with adults more abundant during the early dry season, from about Apr to Jul. **Habitat:** monsoon forest (vine thicket and vine forest), usually along streams where the larval food plant grows as a rampant climber reaching the canopy. **Status:** common but local. **Larval food plant:** *Adenia heterophylla*.

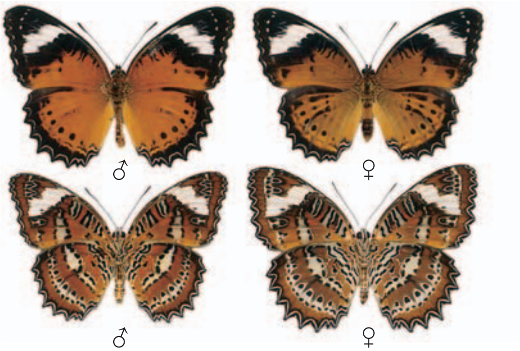
Cruiser *Vindula arsinoe*



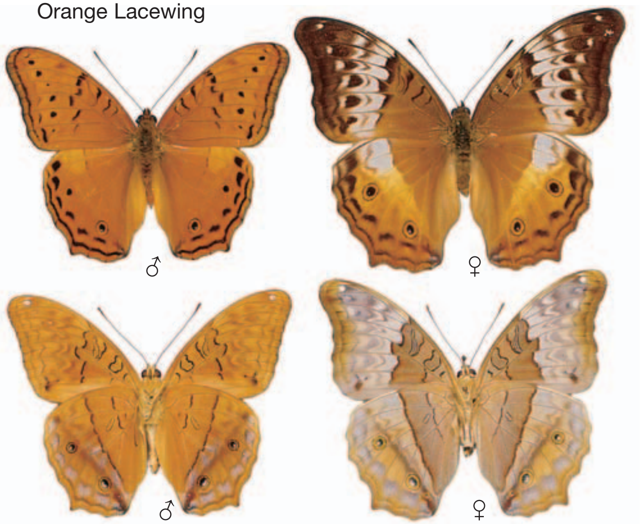
Wingspan: ♂ 75 mm, ♀ 82 mm. **Similar species:** Orange Emperor. Cruiser males have the FW termen less strongly concave, two eyespots on the HW upperside, and lack prominent tails on the HW. **Behaviour:** adults fly in sunlit openings in the forest with a strong gliding flight; they feed at *Lantana* and other flowers, and may imbibe moisture from damp sand bordering creeks, particularly during hot weather, or drink from animal faeces. Males appear to establish territories by perching high up on a leaf in full sunlight, when settled they bask with the wings held outspread or sometimes slightly depressed. Females are much less frequently seen; sometimes they fly high in the canopy but at other times may be observed nearer the ground. Probably several generations completed annually, with adults more abundant just after the wet season. **Habitat:** lowland rainforest, gallery forest and riparian monsoon forest (vine thicket) in coastal areas, where the larval food plants grow. **Status:** common but local. **Larval food plants:** *Adenia heterophylla*, *Hollrungia*, *Passiflora aurantia*; possibly **Passiflora subpeltata*.



Red Lacewing

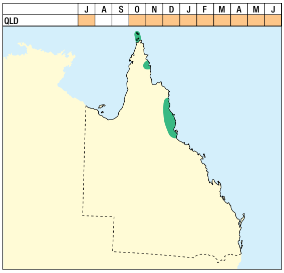


Orange Lacewing



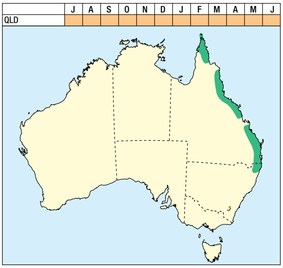
Cruiser

Tailed Rustic *Vagrans egista*



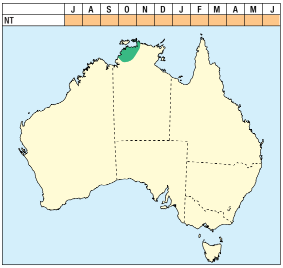
Other name: Australian Vagrant. **Wingspan:** ♂ 51 mm, ♀ 58 mm. **Similar species:** none. The Tailed Rustic has the upperside colour bright brownish-orange, with narrow black margins, and a short tail near the HW tornus. **Behaviour:** adults have a rapid flight and settle on low vegetation; they are usually found along the edges of the forest or sometimes along tracks and clearings. Males patrol creeks during the morning but by midday they fly higher and frequently perch, with wings closed, on a prominent leaf in sunlit patches several metres above the ground to establish territories. Probably several generations completed annually; adults may be abundant seasonally. **Habitat:** lowland rainforest, where the larval food plant grows. **Status:** generally uncommon and local. **Larval food plant:** *Homalium circumpinnatum* in the Wet Tropics, QLD.

Bordered Rustic *Cupha prosope*

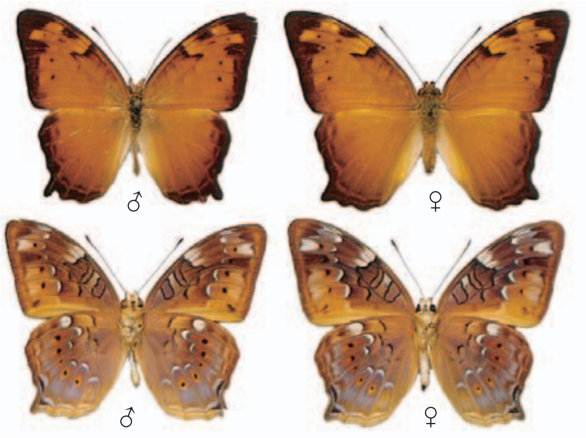


Other names: Australian Rustic, Northern Rustic. **Wingspan:** ♂ 47 mm, ♀ 53 mm. **Similar species:** Northern Sword-grass Brown, Lurcher. The Bordered Rustic has a broad bright orange median band on the HW upperside compared to the Northern Sword-grass Brown. It is smaller, and has the termen of both wings evenly rounded compared to the Lurcher. **Variation:** two seasonal forms. **Behaviour:** adults fly low and frequently settle on foliage in sunlit patches about 0.5–2 m from the ground; when settled the wings are slowly opened and partially closed in a pulsating manner, when widely expanded the wings reveal the contrasting upperside colours of bright orange and black. They are usually found in sunny openings and small clearings in the forest, especially along creeks. Probably several generations completed annually in n. QLD, with adults more abundant at the end of the wet season. **Habitat:** edges of rainforest, particularly gallery forest and riparian monsoon forest (vine thicket), where the larval food plants grow. **Status:** common and widespread; less common in se. QLD and ne. NSW. **Larval food plants:** usually *Scolopia braunii*; also *Flacourtia jangomas, Xylosma ovatum, X. terraereginae, *Flacourtia indica.*

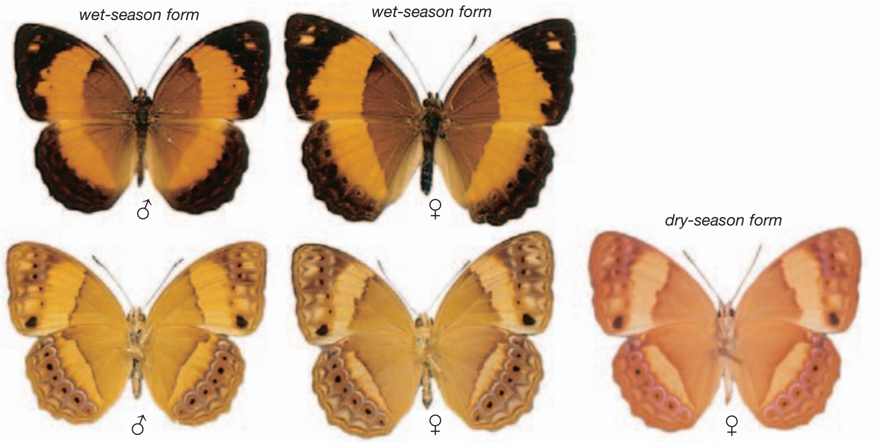
Spotted Rustic *Phalanta phalantha*



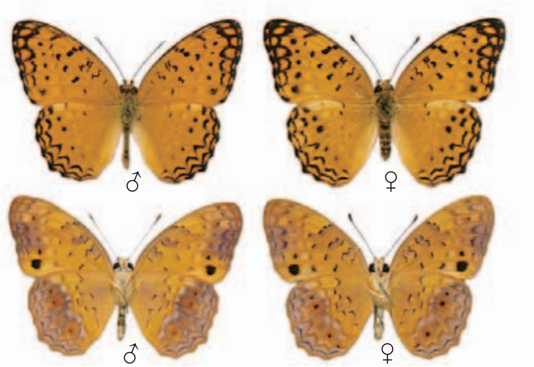
Other name: Leopard. **Wingspan:** ♂ 46 mm, ♀ 46 mm. **Similar species:** none. The Spotted Rustic has the upperside colour bright orange, with numerous brown-black spots and lines. **Behaviour:** adults usually fly close to the ground near the larval food plant; sometimes they fly rapidly near treetops and settle on the upper parts of trees. Probably several generations completed annually at Darwin, with adults most abundant after the wet season, around May, and again in the late dry season, when the food plants produce copious new growth. **Habitat:** coastal and riparian monsoon forest (vine thicket), where the native larval food plant grows; also suburban gardens at Darwin. **Status:** common but local and restricted to ne. NT. **Larval food plants:** usually *Flacourtia territorialis*; also **Flacourtia inermis, *F. rukam.*



Tailed Rustic

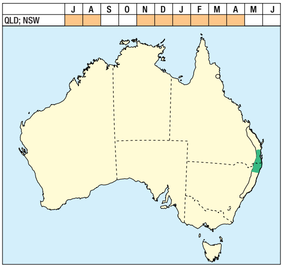


Bordered Rustic



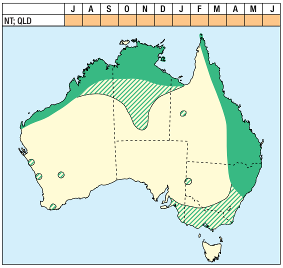
Spotted Rustic

Laced Fritillary *Argyreus hyperbius*



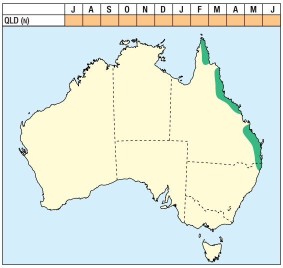
Other name: Australian Fritillary. **Wingspan:** ♂ 60 mm, ♀ 66 mm. **Similar species:** none. The Laced Fritillary has the upperside colour pale orange-brown, with numerous black spots, and a pinkish-orange area on the FW underside. **Behaviour:** adults have a slow, fluttering and gliding flight; they often settle on low vegetation or on the ground, and may feed from flowers. Probably several generations completed annually, with adults more frequently observed during winter. The seasonal history, however, is not fully understood; in some years adults are very abundant in summer, but scarce in others. **Habitat:** open-sedgeland, wetlands and swamps in coastal areas, where the larval food plant grows as a small insignificant herb in the ground layer beneath clumps of *Lomandra longifolia* and grasses. **Status:** generally uncommon and very local; vulnerable, range has contracted significantly through habitat loss. **Larval food plant:** *Viola betonicifolia*.

Glasswing *Acraea andromacha*

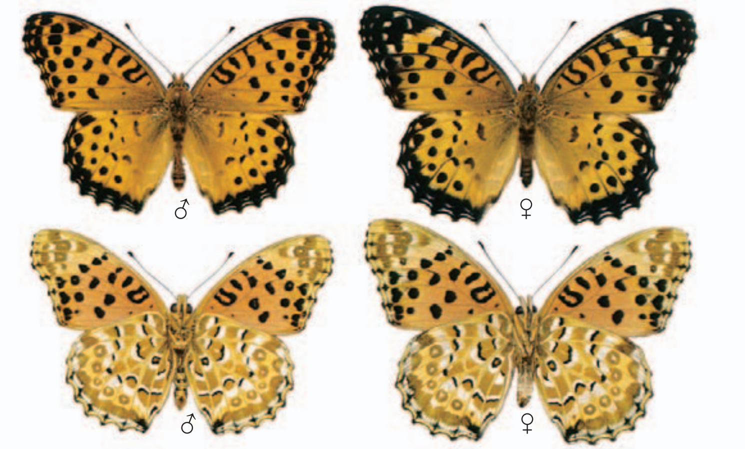


Other names: Little Greasy, Small Greasy. **Wingspan:** ♂ 53 mm, ♀ 56 mm. **Similar species:** Clearing Swallowtail. The Glasswing is smaller, and has cream or pale yellow subterminal spots on the HW. **Behaviour:** adults have a slow, sailing or gliding flight within a few metres of the ground; they pause occasionally to settle on low vegetation or to feed from flowers; they often rest together at dusk, with head upwards and wings tightly closed, on the end of dead twigs to roost for the evening. Males patrol soon after sunrise searching for freshly emerged females still perched near their pupal cases. Probably several generations completed annually in NT and QLD, with adults apparently less abundant during winter. Adults occasionally disperse southwards or make inland extensions during favourable seasons, far outside the normal breeding range. **Habitat:** woodland, open-woodland and grassland in tropics and subtropics, where the larval food plants grow. **Status:** common and widespread. **Larval food plants:** usually *Passiflora cinnabarina, P. herbertiana, Adenia heterophylla, Hybanthus enneaspermus* in coastal, subcoastal areas; *H. stellarioides* near Brisbane; *H. aurantiacus* in arid, semi-arid areas; also **Passiflora mollissima,* **P. suberosa,* **P. subpeltata*.

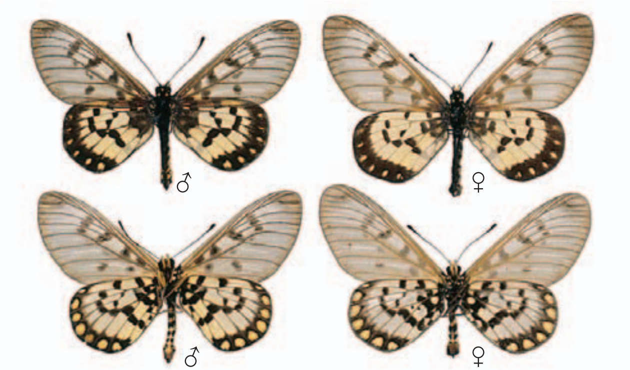
Jezebel Nymph *Mynes geoffroyi*



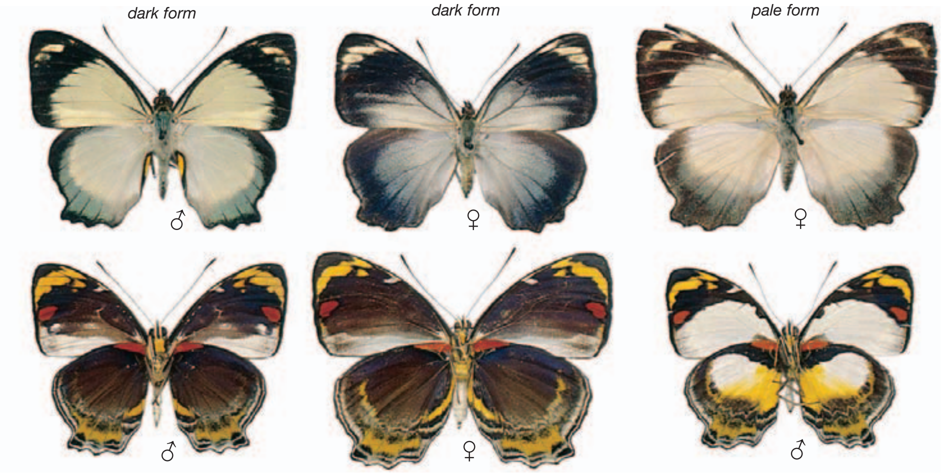
Other name: White Nymph. **Wingspan:** ♂ 50 mm, ♀ 57 mm. **Similar species:** Black Jezebel, Red-banded Jezebel. The Jezebel Nymph has a projection on the HW termen between veins M_3 and CuA_1, and proportionally longer antennae. **Variation:** two polymorphic forms. **Behaviour:** males select corridors or flight paths, such as along creeks, streams, tracks and other suitable gaps in the forest, where they perch on particular leaves up to 8 m above the ground to establish territories; when settled they face an open area with wings closed. Probably several generations completed annually. The immature stages are gregarious and develop uniformly so that the adults of any given cohort emerge simultaneously. **Habitat:** usually lowland rainforest, especially along streams and disturbed or regrowth areas where the larval food plants flourish; also upland rainforest up to about 800 m, and suburban gardens where trees of *Pipturus* are grown. **Status:** generally common but local; less common in ne. NSW. **Larval food plants:** *Dendrocnide moroides, D. photinophylla, Pipturus argenteus*.



Laced Fritillary

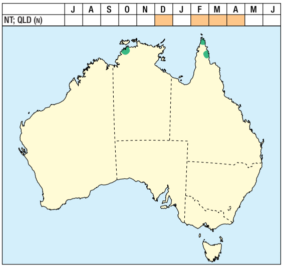


Glasswing



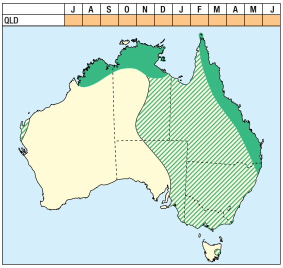
Jezebel Nymph

Crow Eggfly *Hypolimnas anomala*



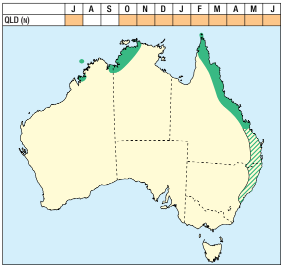
Wingspan: ♂ 72 mm, ♀ 76 mm. **Similar species:** Blue-banded Eggfly, crows. The Crow Eggfly lacks the FW white broken subapical band, which is present in female brown forms of the Blue-banded Eggfly (*Hypolimnas alimena darwinensis*, *H. a. lamina* 'form B'). It has the wings broader, with the FW termen concave compared to species of crows. **Behaviour:** not recorded. **Habitat:** adults have been collected in tropical rainforest and monsoon forest at Darwin, NT, Lockerbie Scrub and Iron Range, QLD. **Status:** rare, local and restricted, known from very few specimens from the Australian mainland in n. NT and n. QLD. **Larval food plant:** not recorded. Possibly *Pipturus argenteus*.

Varied Eggfly *Hypolimnas bolina*

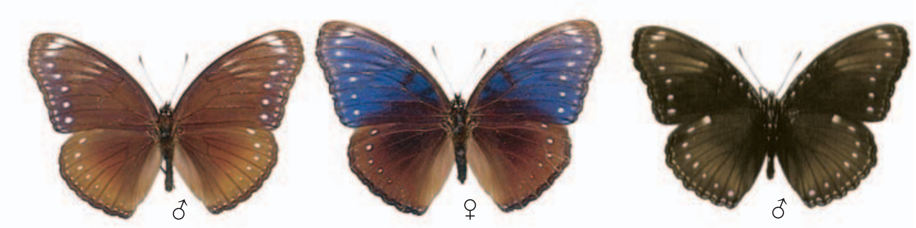


Other name: Common Eggfly. **Wingspan:** ♂ 76 mm, ♀ 86 mm. **Similar species:** Danaid Eggfly, Lesser Wanderer. **Variation:** females have at least six polymorphic forms, with intermediate forms; size and brightness varies seasonally in females. **Behaviour:** males establish territories by perching on trees adjacent to an open area, or sometimes on the ground, close to dense patches of the larval food plant; they typically perch on the outer leaves 1–2 m or more above the ground, and are most active from mid morning to mid afternoon on clear sunny days. Females are usually observed flying close to the ground searching for suitable food plants. Several generations completed annually in ne. QLD, with adults most abundant during the wet season. During the winter dry season (Apr–Sep) the usual food plants die off and females shelter in gullies but do not breed. Vagrants occasionally disperse well outside the normal breeding range into the semi-arid and arid zones and the temperate areas of se. Australia and TAS. **Habitat:** wide variety of habitats in tropical coastal and subcoastal areas, preferring damp shady areas and moist banks of creeks where the larval food plants grow in the ground layer; also suburban gardens. **Status:** common and widespread. **Larval food plants:** usually *Synedrella nodiflora, Alternanthera denticulata, Sida rhombifolia*; also *Asystasia, Dipteracanthus, Pseuderanthemum, Ruellia, Persicaria, *Galinsoga, *Richardia.*

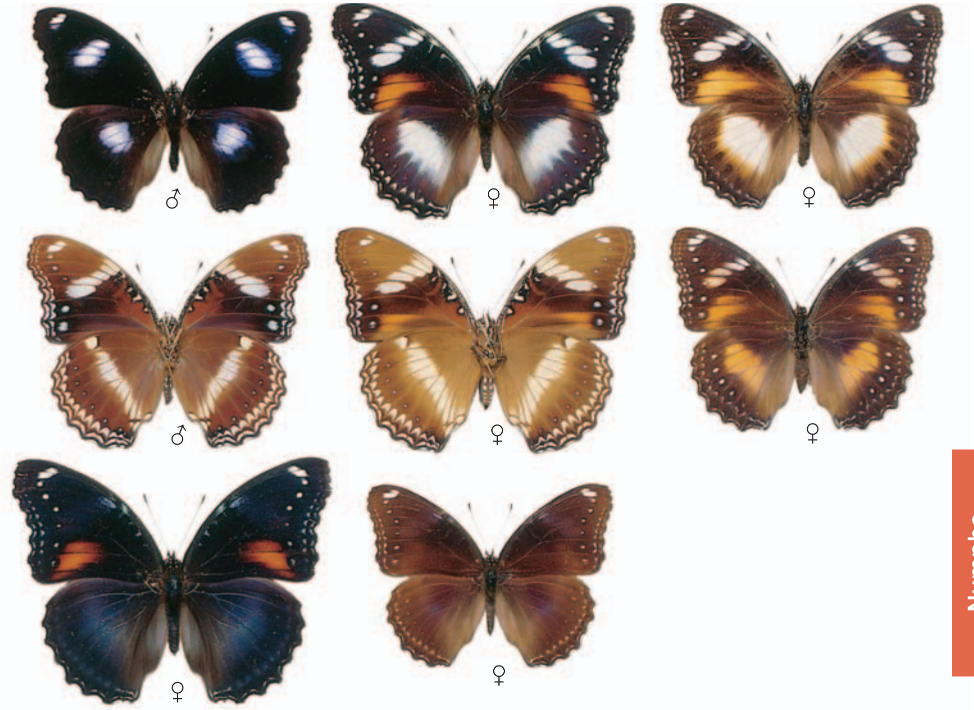
Danaid Eggfly *Hypolimnas misippus*



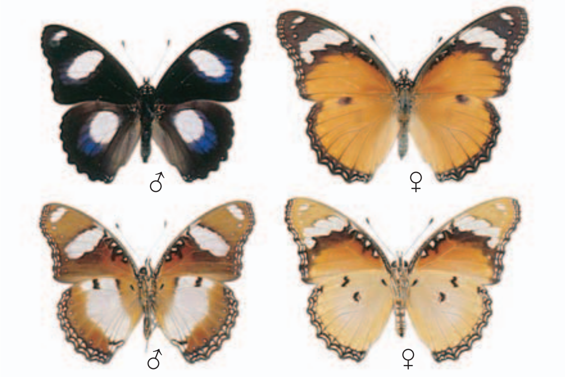
Wingspan: ♂ 56 mm, ♀ 67 mm. **Similar species:** Lesser Wanderer, Orange Tiger, Orange Lacewing, Varied Eggfly. Danaid Eggfly females have a black costal spot on the HW upperside, and the FW termen more concave with a double row of white terminal spots on the upperside. Males have the HW underside white band broader than in Varied Eggfly males. **Behaviour:** males are very territorial, and perch on trees adjacent to open areas. Possibly several generations completed annually, with adults less abundant during the late dry season. Breeding pattern not clearly understood: in some years it is very common in n. QLD, but then becomes scarce for several years; during favourable seasons adults occasionally disperse south of the Tropic of Capricorn to se. QLD and n. and cc. NSW where breeding populations are not permanently established. **Habitat:** eucalypt open-forest and rainforest edge. **Status:** generally uncommon but widespread. **Larval food plants:** *Asystasia gangetica, Pseuderanthemum variabile, Portulaca oleracea.*



Crow Eggfly

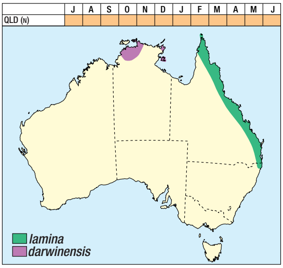


Varied Eggfly



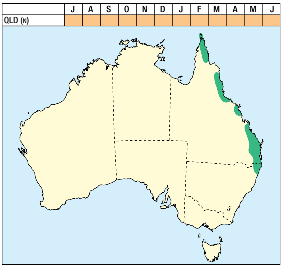
Danaid Eggfly

Blue-banded Eggfly *Hypolimnas alimena*



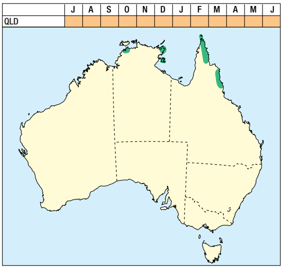
Wingspan: ♂ 69 mm, ♀ 67 mm. **Similar species:** Crow Eggfly, crows. Female brown forms of the Blue-banded Eggfly (*H. a. darwinensis*, *H. a. lamina* 'form B') have a broken band of four large white subapical spots on the FW, not present in the Crow Eggfly. They have the wings broader, with the FW termen concave compared to species of crows. **Variation:** two subspecies; *H. a. lamina* females have two polymorphic forms, with intermediate forms. **Behaviour:** males perch on a prominent leaf a few metres above the ground in sunlit patches or sometimes on the ground in small clearings where they establish territories; when settled the wings may be slowly opened and closed, revealing the iridescent blue upperside. Females more usually observed flying slowly close to the ground searching for suitable larval food plants. Several generations completed annually in n. QLD, with adults more abundant during and shortly after the wet season. **Habitat:** edges of lowland rainforest and gallery forest, where the usual larval food plant grows as a small herb in the ground layer. **Status:** generally common and widespread; less common in se. QLD and ne. NSW. **Larval food plants:** usually *Pseuderanthemum variabile*; also *Asystasia gangetica*, **Graptophyllum pictum*.

Leafwing *Doleschallia bisaltide*

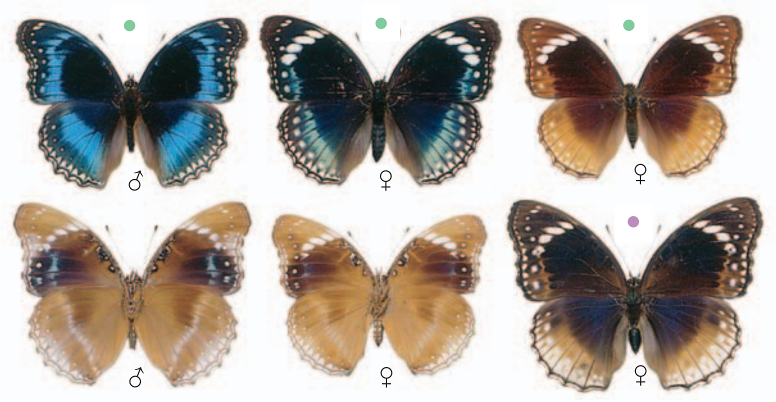


Other name: Australian Leafwing. **Wingspan:** ♂ 62 mm, ♀ 65 mm. **Similar species:** none. The Leafwing has the HW tornus produced into a conspicuous tail. **Variation:** underside ground colour and intensity of markings very variable. **Behaviour:** adults have a strong and rapid flight; they usually fly for only a short distance before settling on the ground in sunlight with wings outspread, or beneath a leaf with wings closed, resembling a dead leaf. Females often seen flying close to the ground near the larval food plant. Possibly several generations completed annually, with adults most abundant during and immediately after the wet season. **Habitat:** usually lowland rainforest, where the usual larval food plant grows as a small herb in the ground layer; also suburban gardens at Brisbane. Adults often fly in the adjacent woodland and open-forest but do not appear to breed in these habitats. **Status:** common and widespread. **Larval food plants:** usually *Pseuderanthemum variabile*; also *Asystasia gangetica*, *Ruellia*, **Graptophyllum pictum*, **Pseuderanthemum bicolor*, **Strobilanthes isophyllus*.

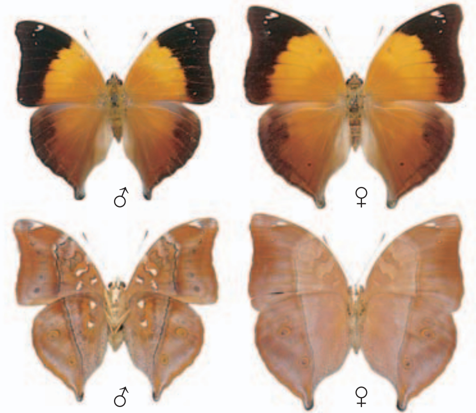
Lurcher *Yoma sabina*



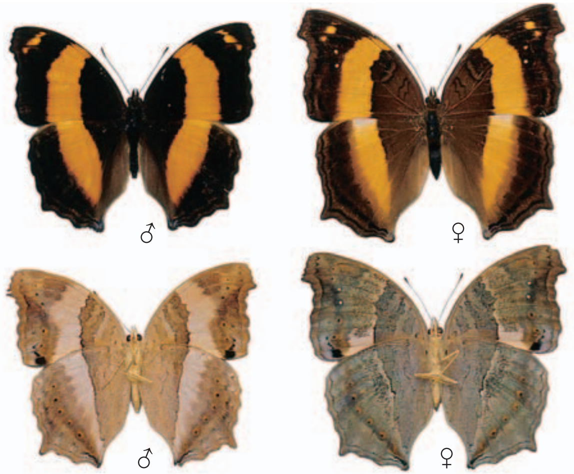
Other name: Australian Lurcher. **Wingspan:** ♂ 67 mm, ♀ 69 mm. **Similar species:** Orange-banded Plane, Bordered Rustic. The Lurcher has projections on the termen of both wings. Upperside orange bands broader than in the Orange-banded Plane. **Variation:** underside pattern appears to vary seasonally. **Behaviour:** adults settle on foliage with wings outspread in sunlit patches within the forest; when settled with wings closed they are very difficult to detect. Probably several generations completed annually, with adults most abundant during the wet season. Breeding pattern not clearly understood; large aggregations of adults have been recorded during the winter dry season. **Habitat:** usually lowland rainforest and edges of monsoon forest (vine thicket), preferring swampy areas and near creeks where the larval food plants grow as small herbs in the ground layer. **Status:** common but local. **Larval food plants:** *Dipteracanthus bracteatus*, *Ruellia*.



Blue-banded Eggfly



Leafwing

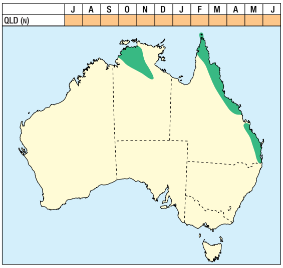


Lurcher

Chocolate Argus *Junonia hedonia*

Other names: Brown Argus, Brown Soldier, Chocolate Soldier. **Wingspan:** ♂ 50 mm, ♀ 51 mm. **Similar species:** Northern Argus. The Chocolate Argus has the HW tornus more produced. **Variation:** two seasonal forms; 'dry-season form' occurs from about May to Aug in ne. QLD. **Behaviour:** adults fly close to the ground with a strong gliding flight and wings outspread; they frequently perch, head downwards with wings closed, on the stems of low shrubs and grasses and resemble a dried dead leaf; during very hot weather they settle on the ground in the shade of trees bordering swamps. Probably several generations completed annually, with adults more abundant towards the end of, and soon after, the wet season. **Habitat:** paperbark swampland in coastal areas, where the native larval food plant grows as a small herbaceous plant in shallow gullies; adults occasionally disperse and breed temporarily outside the natural habitat. **Status:** common but local. **Larval food plants:** usually *Hygrophila angustifolia* during the wet season; **Hemigraphis alternata, *Ruellia tuberosa* during the dry season; also **Hygrophila costata* in se. QLD.

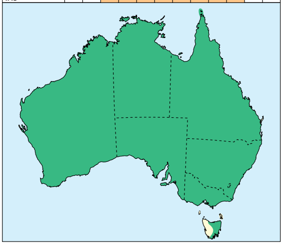
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (N)	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧



Meadow Argus *Junonia villida*

Wingspan: ♂ 40 mm, ♀ 43 mm. **Similar species:** none. The Meadow Argus has on the upperside of each wing two prominent eyespots, each broadly ringed with orange that may coalesce. **Variation:** two seasonal forms in tropics, with intermediate forms. **Behaviour:** adults fly fast within about 1 m of the ground, their flight comprising 1–2 rapid beats interspersed by a short glide with wings outspread; they frequently feed from flowers; during cooler weather they settle on the ground to bask with the wings widely opened. Males frequently perch in a cleared or open spot on the ground to establish territories. Several generations completed annually. Females stop breeding during the dry season in the drier tropical areas. Adults migratory. **Habitat:** wide variety of habitats, particularly woodland, open-woodland and grassland, both in coastal and inland areas; also suburban gardens. **Status:** common and widespread. **Larval food plants:** usually *Plantago* in se. Australia; also *Hygrophila, Ruellia, Epaltes, Evolvulus, Centaurium, Goodenia, Scaevola, Stemodia, Hyptis, Portulaca, Veronica, Verbena, *Scabiosa, *Antirrhinum, *Russelia, *Stachytarpheta, *Lantana, *Phyla, *Verbena*.

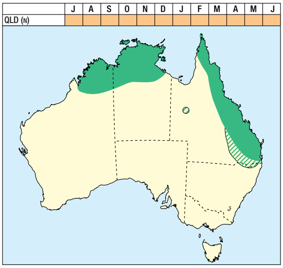
	J	A	S	O	N	D	J	F	M	A	M	J
AUST	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
TAS			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		

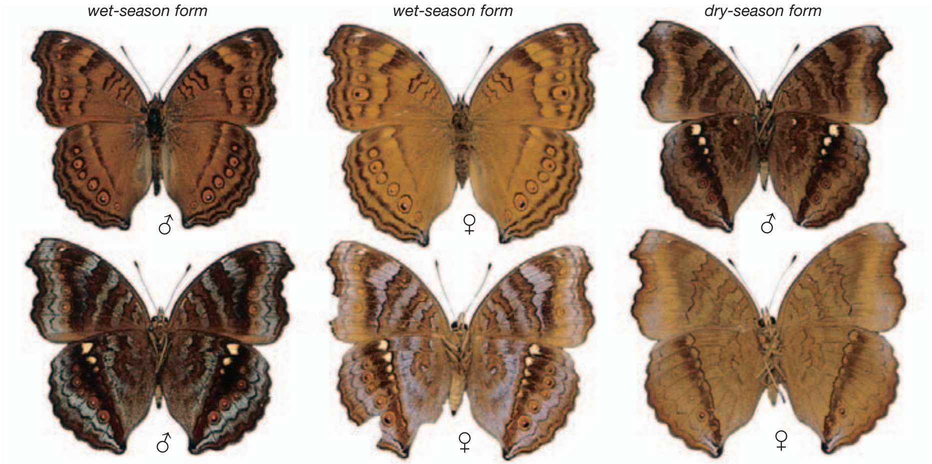


Blue Argus *Junonia orithya*

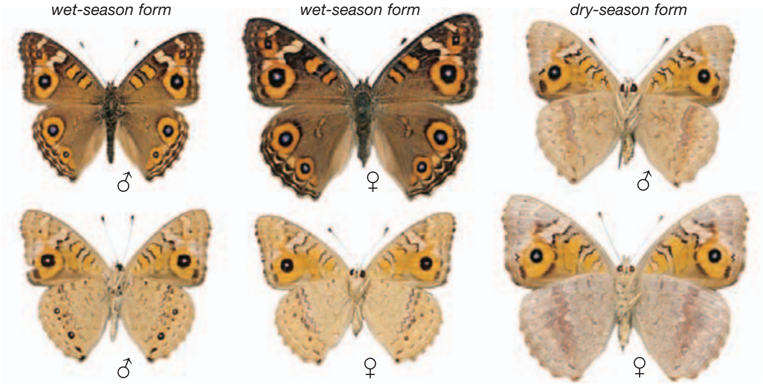
Wingspan: ♂ 40 mm, ♀ 42 mm. **Similar species:** none. The Blue Argus has the HW upperside colour bright blue. **Variation:** two seasonal forms, with intermediate forms. **Behaviour:** adults have a rapid, gliding flight close to the ground; they frequently settle for long periods, often on bare patches of ground, sand or dry creek beds, or on dirt tracks. Males perch on particular patches of ground to bask and establish territories; when settled in full sunlight the wings are often outspread, exposing the brilliant iridescent blue upperside, but when overcast the wings close quickly and they are difficult to detect. Probably several generations completed annually. Females stop breeding during the dry season in the drier tropical areas. Adults disperse considerably according to local conditions. **Habitat:** savannah woodland, where the larval food plants grow as small herbs in the ground layer. **Status:** common and widespread. **Larval food plants:** *Asystasia, Brunoniella Hygrophila, Hypoestes, Justicia, Pseuderanthemum, Rostellularia, Angelonia, Buchnera, Striga, *Thunbergia, *Antirrhinum.*

	J	A	S	O	N	D	J	F	M	A	M	J
QLD (N)	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧

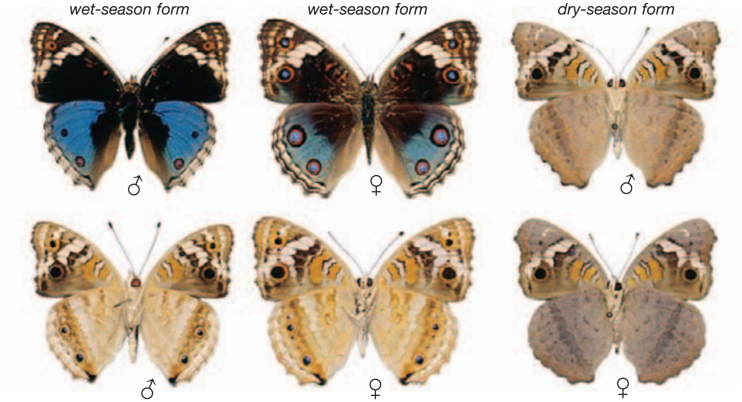




Chocolate Argus

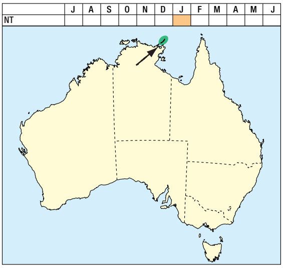


Meadow Argus



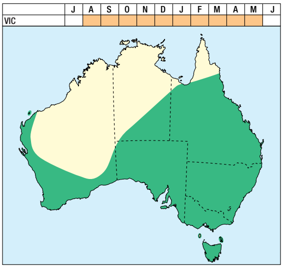
Blue Argus

Northern Argus *Junonia erigone*



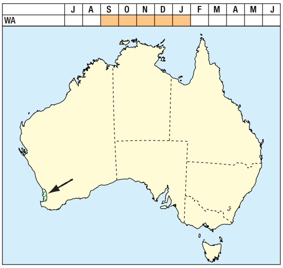
Wingspan: ♂ 45 mm, ♀ 44 mm. **Similar species:** Chocolate Argus. The Northern Argus has a projection on the HW termen at the end of vein CuA$_1$, and a lager eyespot on the FW between veins CuA$_1$ and CuA$_2$. **Behaviour:** not recorded. Possibly not permanently established in Australia. **Habitat:** an adult has been collected from the edges of monsoon forest. **Status:** rare and restricted, known only from a single female from Rimbija Island in the Wessel Islands, NT. **Larval food plant:** not recorded.

Australian Painted Lady *Vanessa kershawi*



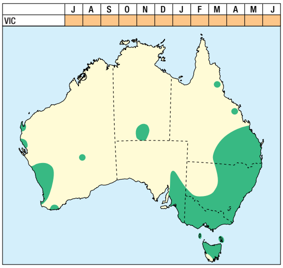
Other name: Blue-spotted Painted Lady. **Wingspan:** ♂ 43 mm, ♀ 47 mm. **Similar species:** Painted Lady. **Behaviour:** adults fly rapidly and frequently settle, with wings partly outspread, on the ground to bask or on flowers to feed. During late afternoon males establish territories by perching on the ground in open sunlit areas on hilltops or passageways. Several generations completed annually, with adults more abundant in spring in s. NSW and VIC. Adults regularly migrate, flying very fast, within about 2 m of the ground. **Habitat:** wide variety of natural and modified habitats, including suburban gardens. **Status:** very common and widespread. **Larval food plants:** *Ammobium, Bracteantha, Chrysocephalum, Helichrysum, Gnaphalium, Rhodanthe, *Arctotheca.*

Painted Lady *Vanessa cardui*

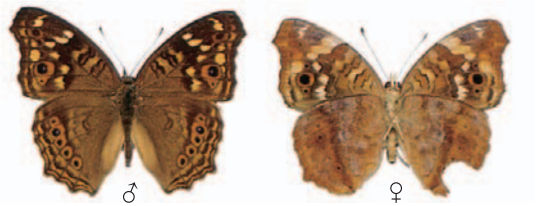


Other name: European Painted Lady. **Wingspan:** ♂ 45 mm, ♀ 46 mm. **Similar species:** Australian Painted Lady. The Painted Lady has the FW more elongated, and five black subterminal spots, without blue centres, on the HW upperside. **Behaviour:** not recorded. In some years adults are abundant, but breeding populations appear to be temporary and not permanently established, possibly dependant on arrival of immigrants from Africa. **Habitat:** suburban areas. **Status:** generally rare and restricted to coastal WA, known only from Bunbury, Fremantle and Rottnest Island. **Larval food plant:** **Lavatera arborea.*

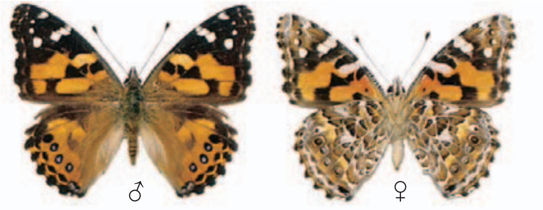
Yellow Admiral *Vanessa itea*



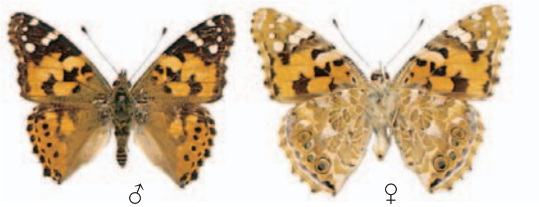
Other name: Australian Admiral. **Wingspan:** ♂ 50 mm, ♀ 50 mm. **Similar species:** none. **Behaviour:** adults fly rapidly and frequently settle, with head directed downwards and wings outspread or closed, on leaves or tree-trunks; they often feed from flowers or sap flows. During the mid or late afternoon males hilltop and establish territories by perching, with wings outspread towards the sun, on rocks, bare patches of ground or foliage of low shrubs. Adults migratory. **Habitat:** wide variety of habitats, preferring damp slopes, gullies, banks of creeks and rivers; also suburban areas. **Status:** generally common and widespread. **Larval food plants:** *Parietaria debilis, Pipturis argenteus, Urtica incisa, *Parietaria judaica, *Soleirolia soleirolii, *Urtica urens.*



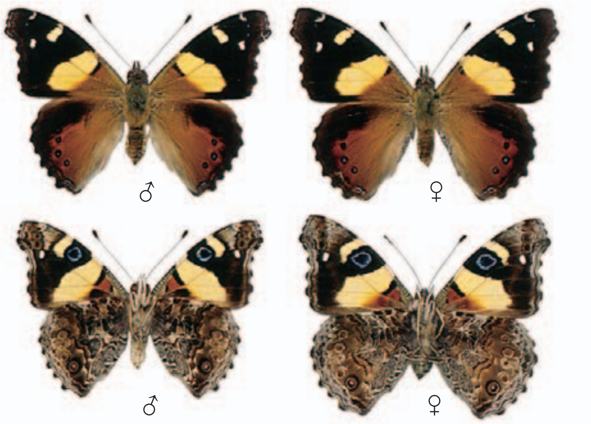
Northern Argus



Australian Painted Lady



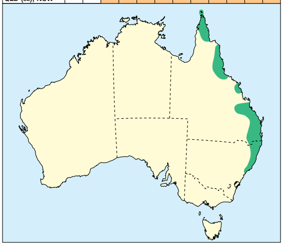
Painted Lady



Yellow Admiral

White-banded Plane *Phaedyma shepherdi*

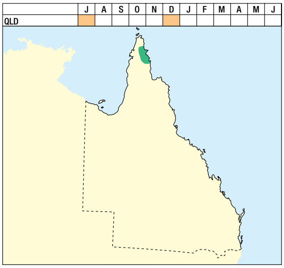
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (N)	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
QLD (SE); NSW			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧



Other name: Common Aeroplane. **Wingspan:** ♂ 55 mm, ♀ 57 mm. **Similar species:** Black-eyed Plane, Yellow-eyed Plane. The White-banded Plane is larger, and has the HW white central band narrower and relatively straight. **Variation:** width of the HW white central band, and extent of greenish tinge to upperside white markings vary. **Behaviour:** adults have a distinctive gliding flight and frequently settle on vegetation in sunlight with wings outspread. Males appear to establish territories, returning repeatedly to perch on or near the same leaf in an open sunny patch in the forest. Probably several generations completed annually in n. QLD, with adults apparently more abundant during Sep–Oct and Feb–May. **Habitat:** edges of rainforest, gallery forest and riparian monsoon forest (vine thicket) in coastal areas; also suburban gardens in Brisbane. **Status:** common and widespread. **Larval food plants:** *Argyrodendron, Bombax, Cordia, Ehretia, Mucuna, Pongamia, Brachychiton, Grewia, Aphananthe, Celtis, *Celtis sinensis.*

Orange-banded Plane *Lexias aeropa*

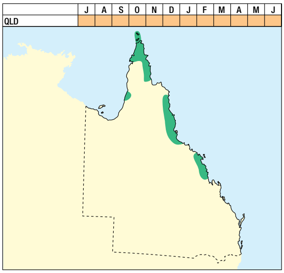
	J	A	S	O	N	D	J	F	M	A	M	J
QLD	🟧					🟧						



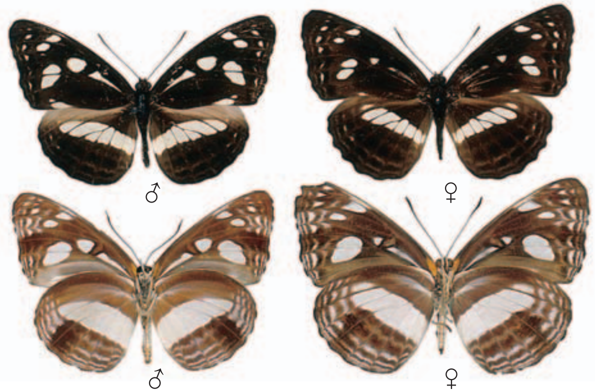
Other name: Orange Nymph. **Wingspan:** ♂ 61 mm, ♀ 84 mm. **Similar species:** Lurcher. Orange-banded Plane males have narrower orange bands on the upperside, and lack projections on the termen of both wings. **Behaviour:** adults fly extremely rapidly; they usually fly a short distance a few metres above the ground before settling on a leaf, with wings outspread, in sunlit clearings; they feed at skins of rotting bananas and fermenting fruits or drink from moist sand near the edges of creeks. Number of generations completed annually not recorded. **Habitat:** adults have been collected in edges of lowland tropical rainforest and paperbark swampland adjacent to coastal riparian closed-forest. **Status:** rare and restricted, known only from a few specimens from the Shelburne Bay area near Captain Billy Creek on Cape York Peninsula, QLD; a female has also been observed at Iron Range. **Larval food plant:** not recorded. Possibly *Calophyllum*.

Orange Plane *Pantoporia consimilis*

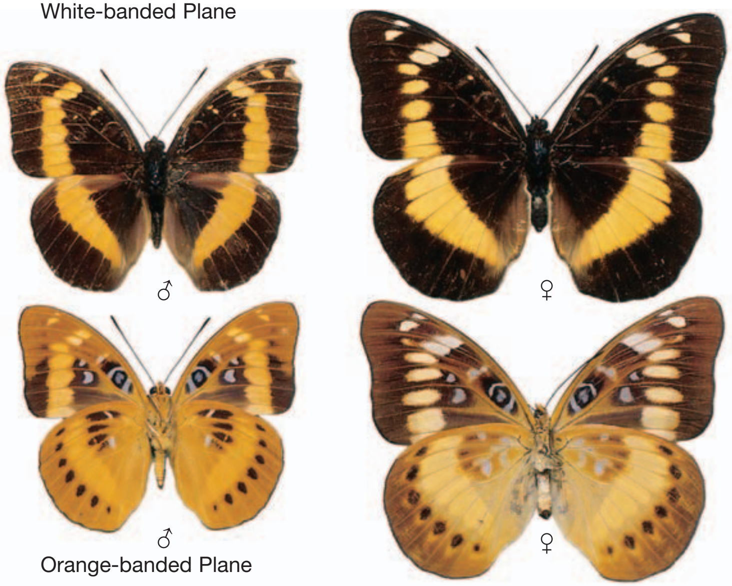
	J	A	S	O	N	D	J	F	M	A	M	J
QLD	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧



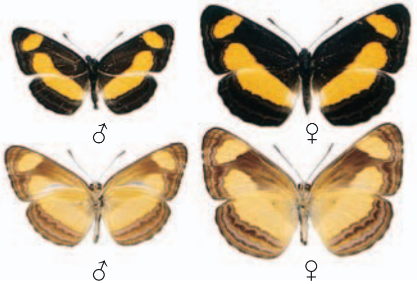
Other name: Orange Aeroplane. **Wingspan:** ♂ 38 mm, ♀ 41 mm. **Similar species:** none. The Orange Plane has two large conspicuous orange-yellow spots on the FW upperside, and an orange-yellow band on the HW upperside. **Behaviour:** adults have a slow, gliding flight in the understorey and often settle on the upper surface of a leaf about 1–3 m above the ground to bask in sunlight with wings outspread, displaying the vivid orange-yellow colours. Probably several generations completed annually. **Habitat:** edges of gallery forest and lowland riparian closed-forest, and margins of mangrove, where the larval food plants grow. **Status:** common but local. **Larval food plants:** *Austrosteenisia blackii, Dalbergia candenatensis, Derris* in the Wet Tropics, QLD.



White-banded Plane

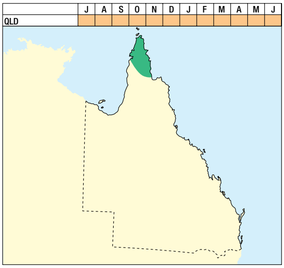


Orange-banded Plane



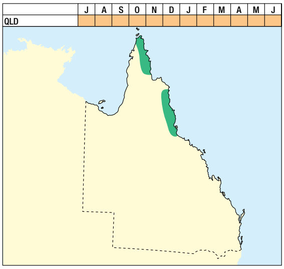
Orange Plane

Black-eyed Plane *Pantoporia venilia*



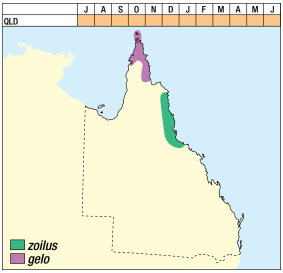
Other name: Cape York Aeroplane. **Wingspan:** ♂ 42 mm, ♀ 45 mm. **Similar species:** Yellow-eyed Plane, Hamadryad, White-banded Plane. The Black-eyed Plane has the termen of the wings less rounded, and the HW underside white central band smaller compared to the Yellow-eyed Plane. It has a series of white subterminal spots on the upperside of both wings, which are absent in the Hamadryad. **Behaviour:** adults have a slow gliding flight, and settle for short periods in sunny glades. Number of generations completed annually not recorded. **Habitat:** edges of riparian closed-forest, where the larval food plant grows. **Status:** common but local and restricted to Cape York Peninsula, from Cape York to Port Stewart, QLD. **Larval food plants:** *Lepidopetalum subdichotomum*.

Yellow-eyed Plane *Neptis praslini*

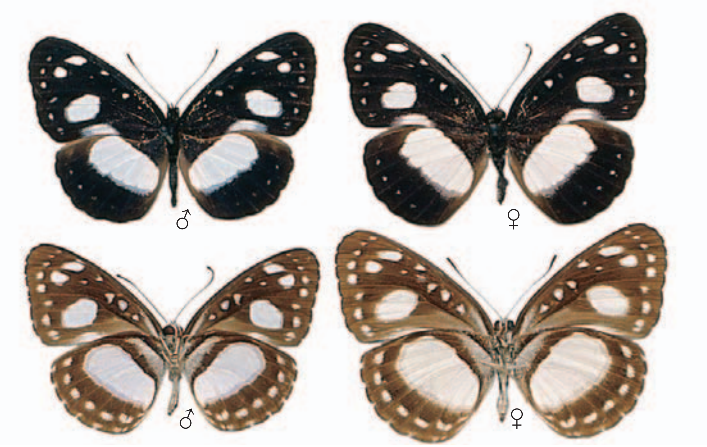


Other name: Black and White Aeroplane. **Wingspan:** ♂ 48 mm, ♀ 50 mm. **Similar species:** Black-eyed Plane, Hamadryad, White-banded Plane. The Yellow-eyed Plane has the white central band on the HW upperside crossed with dark veins, and the eyes yellow (when alive). It has the termen of the wings more rounded, and the HW underside white central band larger than in the Black-eyed Plane. It has a series of white subterminal spots on the upperside of both wings, which are absent in the Hamadryad. **Behaviour:** adults have a slow, gliding flight, with wings outspread, interspersed by one or two rapid beats; they frequently settle on a leaf in open sunlit areas with wings outspread. Several generations completed annually; adults may be abundant seasonally **Habitat:** lowland tropical rainforest and riparian closed-forest, where the larval food plant grows. **Status:** generally uncommon and local. **Larval food plants:** *Phylacium bracteosum* on Cape York Peninsula; *Erycibe coccinea*, *Briedelia penangiana* in the Wet Tropics, QLD.

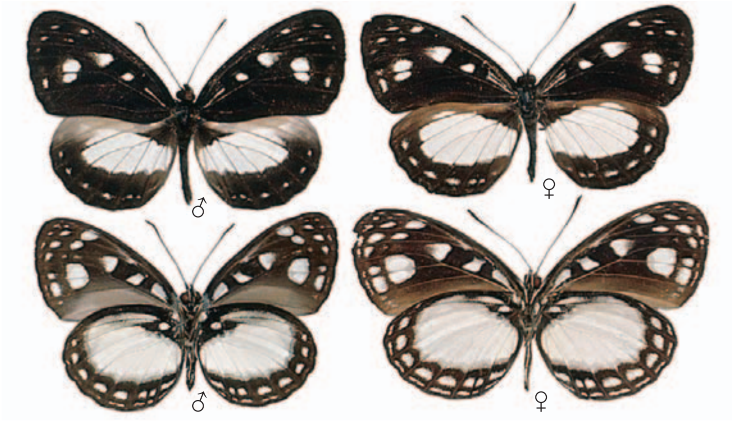
Hamadryad *Tellervo zoilus*



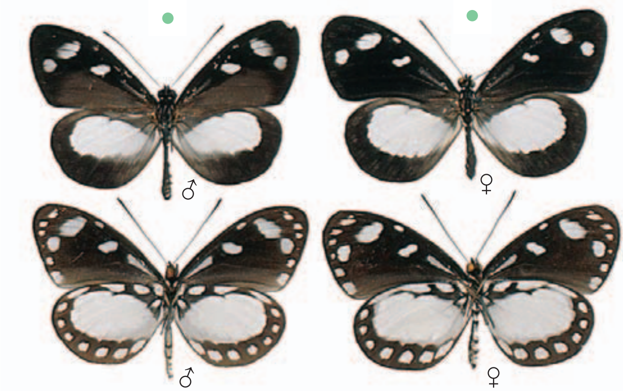
Other names: Cairns Hamadryad, Cape York Hamadryad. **Wingspan:** ♂ 40 mm, ♀ 43 mm. **Similar species:** Black-eyed Plane, Yellow-eyed Plane. The Hamadryad has fewer white spots on the FW upperside, and lacks white subterminal spots on the HW upperside. **Variation:** two subspecies. **Behaviour:** adults have a relatively slow and weak flight; they fly in the forest understorey where they are often difficult to detect in the high contrasting sunlight and dark shade; they fly throughout the day, even on overcast or rainy days, though are more active during the early morning. Males establish leks in sunny patches to attract females; towards dusk they rest communally. Several generations completed annually. **Habitat:** tropical rainforest, where the usual larval food plant grows as a vine. **Status:** common and widespread. **Larval food plants:** usually *Parsonsia latifolia*; occasionally *P. ferruginea*, *P. straminea*.



Black-eyed Plane

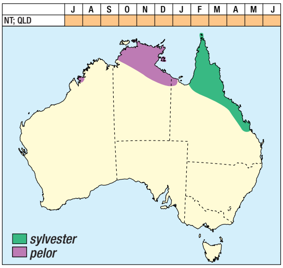


Yellow-eyed Plane



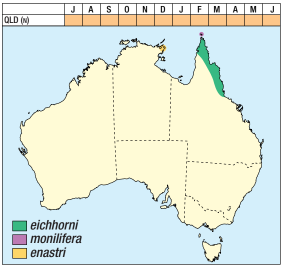
Hamadryad

Two-brand Crow *Euploea sylvester*



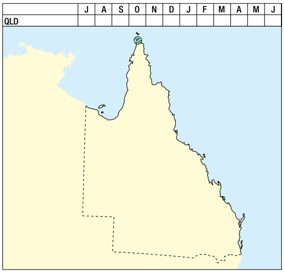
Wingspan: ♂ 67 mm, ♀ 66 mm. **Similar species:** crows. Two-brand Crow males have the FW upperside sex-brand as two dull black elliptical patches. Females have 2–3 white costal spots above the end of the cell and only two large white subapical spots on the FW. **Variation:** two subspecies. **Behaviour:** adults have a rapid and sailing flight. Probably several generations completed annually, with adults most abundant in late Feb and Mar. Breeding is very seasonal and confined to summer; during the long dry season females do not breed and adults form large aggregations in the breeding habitat, sheltering in shady places, resting on sticks, branches or vines beneath the canopy. Similar aggregation behaviour occurs in the wet season, but only during the heat of the day. **Habitat:** riparian monsoon forest (vine thicket) along banks of gullies, creeks and rivers, usually with flowing water or pools of water, in coastal and drier inland areas, where the usual larval food plants grow as large vines. **Status:** very common but local; less common south of Mackay, QLD. **Larval food plants:** usually *Marsdenia geminata, M. pleiadenia*; occasionally *Ficus racemosa*.

No-brand Crow *Euploea alcathoe*

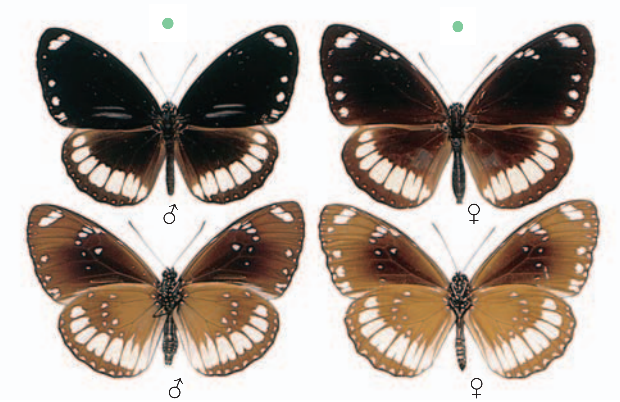


Other names: Alcathoe Crow, Eichhorn's Crow. **Wingspan:** ♂ 67 mm, ♀ 70 mm. **Similar species:** crows. No-brand Crow males lack a sex-brand on the FW upperside. Females (*E. a. eichhorni*) have only one white costal spot above the end of the cell and 4–5 white subapical spots on the FW. The northern subspecies (*E. a. monilifera*, *E. a. enastri*) have the FW apex rounded. **Variation:** three subspecies. **Behaviour:** adults have a slow, lazy flight (*E. a. eichhorni*), or fly more strongly and rapidly with a jerky action and long wing beats (*E. a. monilifera*); they fly within 3 m of the ground in small open sunny glades beneath the canopy, and frequently settle on twigs or large leaves in the understorey. Males patrol small territories. Probably several generations completed annually, with adults mostly seen during the wet season, from about Dec to May. Breeding status and seasonal history not fully understood; small numbers of adults have occasionally been found overwintering in the breeding habitats, clustered on dry branches of paperbark trees or beneath leaves of *Pandanus*. **Habitat:** coastal paperbark swampland bordering mangrove on the mainland in QLD; monsoon forest (vine thicket) adjacent to mangrove in the Torres Strait islands; monsoon forest behind coastal sand dunes in NT. **Status:** common but local. **Larval food plants:** *Gymnanthera oblonga, Hoya australis, Marsdenia australis, Ficus obliqua, *Nerium oleander, *Asclepias*; possibly *Tylophora benthamii* in NT.

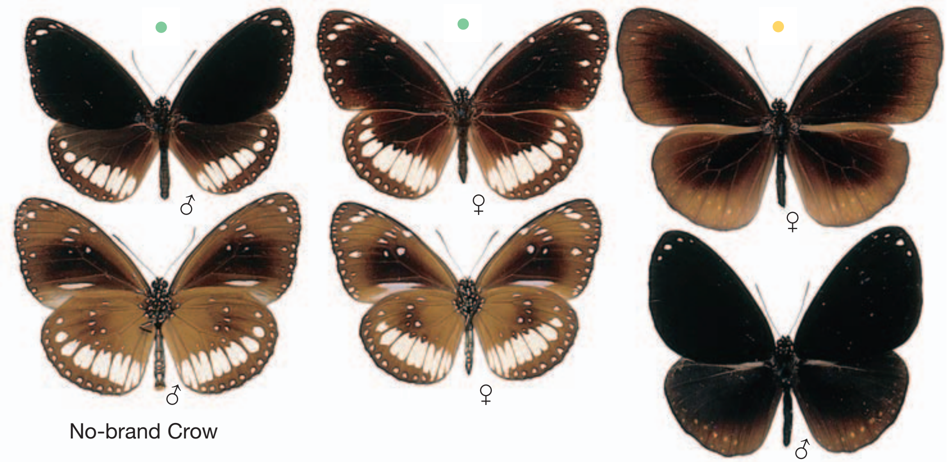
Orange-flash Crow *Euploea leucostictos*



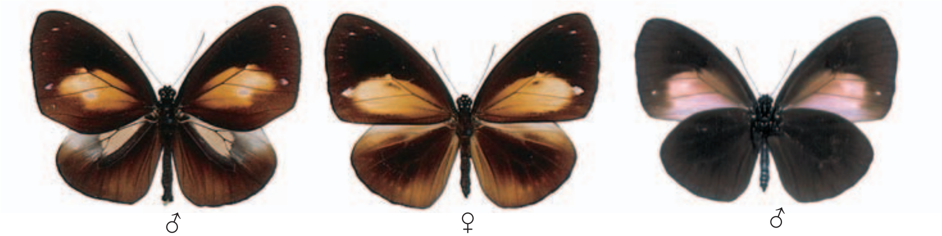
Wingspan: ♂ 64 mm, ♀ 64 mm. **Similar species:** none. The Orange-flash Crow has a large pale orange-brown central patch on the FW. **Behaviour:** adults fly in dark, moist shady areas; males have been observed roosting in company with other species of crows. Number of generations completed annually not recorded. Not certain if species breeds in Australia, or if the few recorded adults represent vagrants from mainland New Guinea. **Habitat:** not recorded. **Status:** rare and restricted to the Torres Strait islands and Cape York, QLD. **Larval food plant:** not recorded. Possibly *Ficus*.



Two-brand Crow

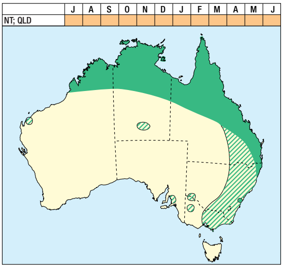


No-brand Crow



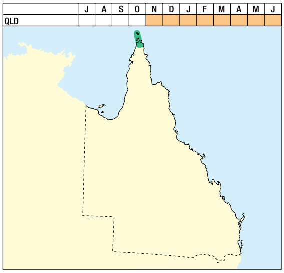
Orange-flash Crow

Common Crow *Euploea core*



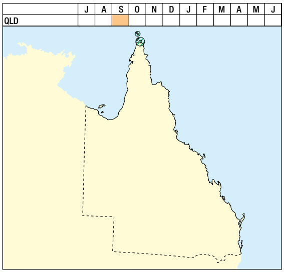
Other names: Common Australian Crow, Oleander Butterfly. **Wingspan:** ♂ 69 mm, ♀ 72 mm. **Similar species:** crows. Common Crow males have the FW upperside sex-brand as a single elliptical patch. It usually has more extensive white spots on the FW, and the HW band of postmedian spots narrower than in the Two-brand and No-brand Crows (*E. a. eichhorni*). **Behaviour:** adults have a weak, sailing flight, usually a few metres above the ground, and feed from a wide range of flowers. Several generations completed annually, with adults most abundant immediately after the wet season. Females do not breed during the dry season when adults form large overwintering aggregations in shady, sheltered areas, resting within a few metres of the ground in patches of monsoon forest along creeks in coastal areas and the Barrier Reef islands, or under overhanging rocks and cave entrances of gorges in the more inland areas. Adults are migratory, and the aggregations begin to disperse towards the end of winter and spring; during summer and early autumn adults occasionally disperse into the temperate areas of se. Australia but breeding populations are not permanently established. **Habitat:** open-forest and woodland in coastal and subcoastal areas of tropics and subtropics; riparian monsoon forest (vine thicket) along river courses, in deep gorges or in moist gullies within rocky ranges in the more inland areas; also suburban gardens where the larval food plants are established. **Status:** very common and widespread. **Larval food plants:** wide variety of native and introduced plants in Apocynaceae, Asclepiadaceae and Moraceae.

Mournful Crow *Euploea algea*

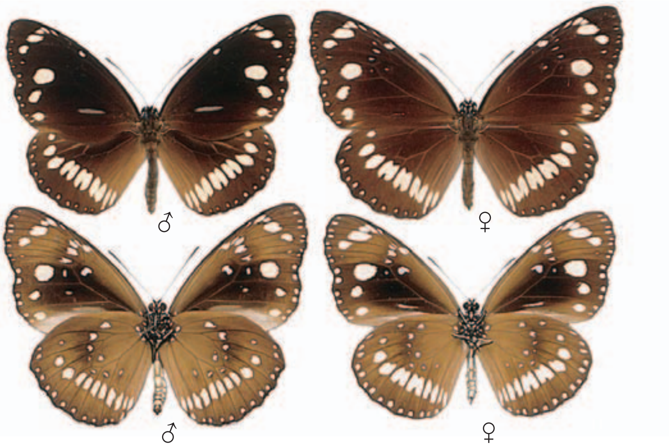


Wingspan: ♂ 70 mm, ♀ 72 mm. **Similar species:** Common Crow. The Mournful Crow usually has the white spots, especially the postmedian series on the HW, smaller in number and size. Males have the FW upperside sex-brand longer and broader. **Variation:** extent of white spots, especially the HW postmedian series, highly variable. **Behaviour:** adults fly in open sunny areas with a slow and gliding flight, within 1–2 m of the ground; they frequently feed from flowers. In mainland New Guinea, they migrate and aggregate during hot weather. **Habitat:** adults have been collected in open, disturbed areas of secondary forest. **Status:** common but restricted to the Torres Strait islands and Cape York, QLD. **Larval food plant:** not recorded. Possibly *Ficus, Ichnocarpus, Cynanchum.*

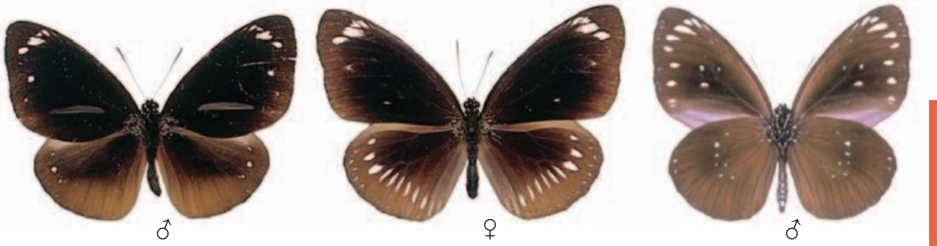
Bates' Crow *Euploea batesii*



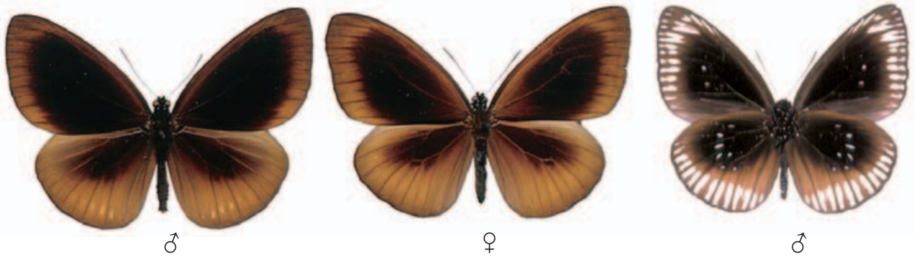
Wingspan: ♂ 72 mm, ♀ 74 mm. **Similar species:** No-brand Crow, Two-brand Crow. Males of Bates' Crow lack a sex-brand. It has a broad pale brown margin on the FW, the FW apex more pointed, and two bluish-grey streaks above the FW underside dorsum compared to unmarked specimens of the No-brand Crow (*Euploea alcathoe monilifera, E. a. enastri*). **Variation:** extent of white subterminal and terminal spots very variable, sometimes absent. **Behaviour:** adults fly in sunshine with a gliding flight; at night they often roost with other species of crows beneath thickets on sand dunes. Not certain if breeding populations are permanently established on the mainland. **Habitat:** adults have been collected in clearings or in open areas along the edges of secondary forest. **Status:** uncommon and restricted to the Torres Strait islands and Cape York, QLD. **Larval food plant:** not recorded. Possibly Apocynaceae.



Common Crow

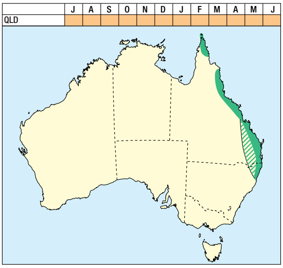


Mournful Crow



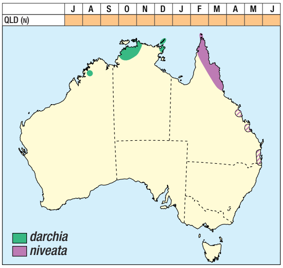
Bates' Crow

Purple Crow *Euploea tulliolus*



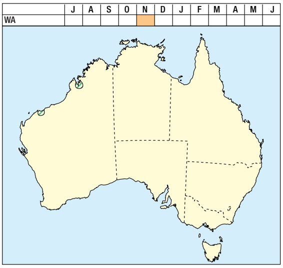
Other name: Eastern Brown Crow. **Wingspan:** ♂ 56 mm, ♀ 60 mm. **Similar species:** Small Brown Crow. The Purple Crow has the FW white subapical spots larger, and the FW termen more rounded. **Behaviour:** adults fly slowly close to the ground. Number of generations completed annually not recorded. Breeding is limited briefly to the wet season when the larval food plant produces new growth; during the long dry season females stop breeding and adults aggregate in large numbers in moist gullies supporting the breeding habitat, woodland or beach scrub, typically settled on dry twigs with wings closed in the shade. Adults disperse from the aggregation sites towards the end of the dry season. **Habitat:** edges of lowland rainforest and riparian closed-forest along the eastern coast and the Great Barrier Reef islands, QLD, where the larval food plant grows as a strangling woody vine. **Status:** common but local; less common south of Brisbane. **Larval food plant:** *Trophis scandens*.

Small Brown Crow *Euploea darchia*

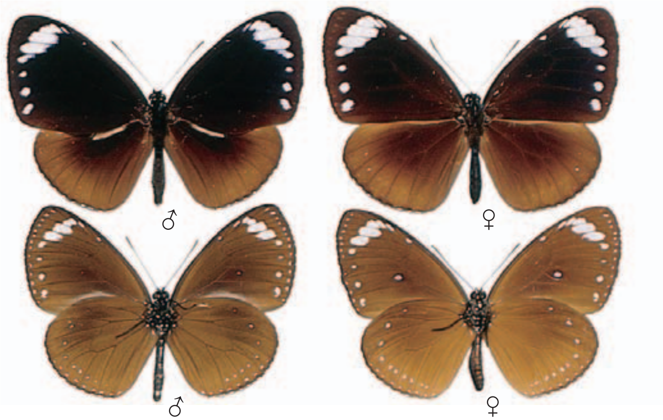


Other names: Darwin Brown Crow, White Margined Crow. **Wingspan:** ♂ 56 mm, ♀ 52 mm. **Similar species:** Purple Crow. The Small Brown Crow has the FW white subterminal spots larger, particularly the two nearest the tornus, and a series of large white subterminal spots on the HW upperside. **Variation:** two subspecies. **Behaviour:** adults have a slow and sailing flight close to the ground. Number of generations completed annually not recorded. Breeding appears to be seasonal and limited to the late wet season, around Feb–Apr in NT, when the larval food plant produces new growth. During the long dry season adults aggregate in shady, swampy areas of the breeding habitat, resting on sticks, branches and vines beneath the canopy. Adults disperse from the aggregation sites towards the end of the dry season, and vagrants are occasionally recorded in c. and se. QLD. **Habitat:** monsoon forest (vine thicket and vine scrub) bordering mangrove in coastal areas or along watercourses further inland, where the larval food plant grows as a strangling woody vine. **Status:** generally common but local; less common south of Cape York Peninsula, QLD. **Larval food plant:** *Trophis scandens*.

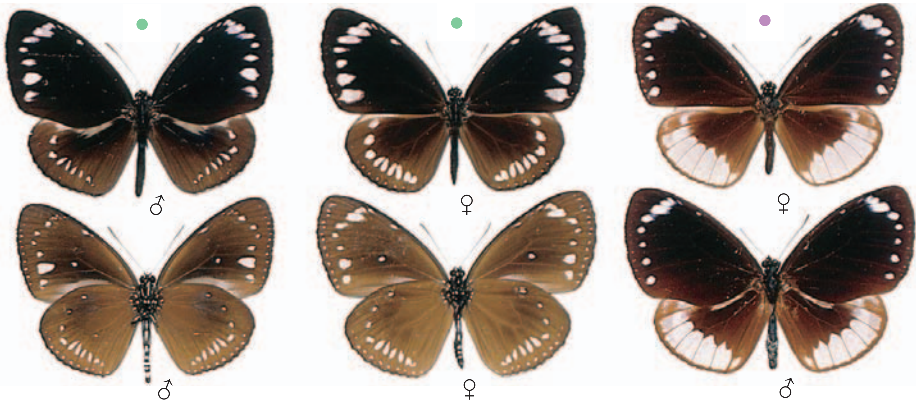
Climena Crow *Euploea climena*



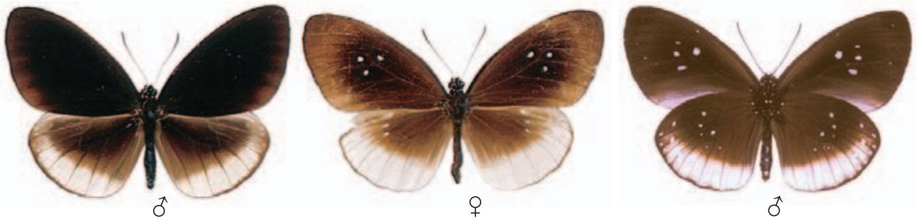
Wingspan: ♂ 60 mm, ♀ 64 mm. **Similar species:** No-brand Crow. The Climena Crow has the HW termen broadly white crossed with brown veins. **Behaviour:** not recorded. Breeding populations are probably not permanently established on the Australian continent. **Habitat:** not recorded. On Christmas Island it occurs in damp shady habitats, including rainforest. **Status:** rare and restricted on the mainland, known only from a few specimens from Roebourne and Derby, WA. **Larval food plant:** not recorded.



Purple Crow

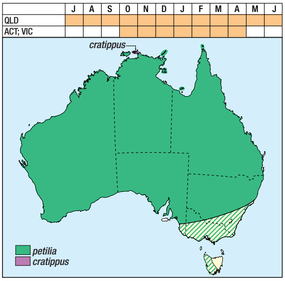


Small Brown Crow



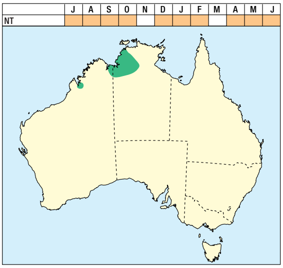
Climena Crow

Lesser Wanderer *Danaus chrysippus*



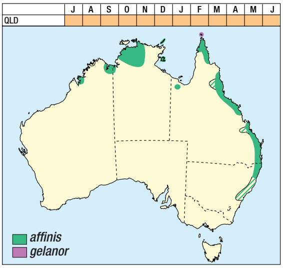
Wingspan: ♂ 60 mm, ♀ 60 mm. **Similar species:** Danaid Eggfly, Orange Tiger, Orange Lacewing. The Lesser Wanderer has the inner veins on the upperside orange, and the termen of the HW upperside rounded and broadly black without white subterminal spots. **Variation:** two subspecies. **Behaviour:** adults usually have a slow, meandering flight close to the ground. Several generations completed annually. Females breed continuously throughout the year. Adults are migratory, and occasionally reach ACT, c. VIC and TAS where breeding populations are not permanently established. Populations possibly very nomadic in the tropical arid areas, dispersing according to local conditions, where several of the native food plants are only available during the early wet season when they reshoot from perennial rootstocks. **Habitat:** wide variety of habitats, preferring open country in the tropics and dry inland. **Status:** common and widespread. **Larval food plants:** *Brachystelma, Cynanchum, Marsdenia, Rhyncharrhena, Sarcostemma, *Asclepias, *Gomphocarpus, *Calotropis.*

Orange Tiger *Danaus genutia*

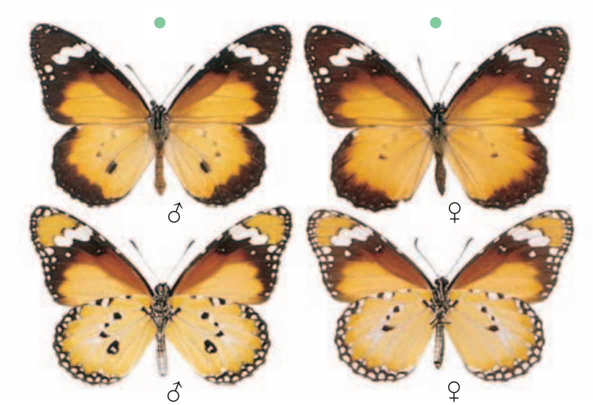


Wingspan: ♂ 56 mm, ♀ 55 mm. **Similar species:** Lesser Wanderer, Danaid Eggfly, Orange Lacewing. The Orange Tiger has the inner veins on the upperside black, and the termen of the HW upperside rounded and black with white subterminal spots. Upper and underside ground colour darker orange than in the Lesser Wanderer. **Behaviour:** adults have a gliding flight; during the wet season they feed from flowers in open grassy areas early in the morning but retreat to the shade of moist swamplands during the heat of the day; during the dry season they usually fly in open shady areas. Probably several generations completed annually. **Habitat:** upper estuarine swamps supporting dense stands of *Typha*, to which the larval food plant grows as a twining perennial vine. **Status:** very common but very local. **Larval food plant:** *Sarcostemma esculentum*.

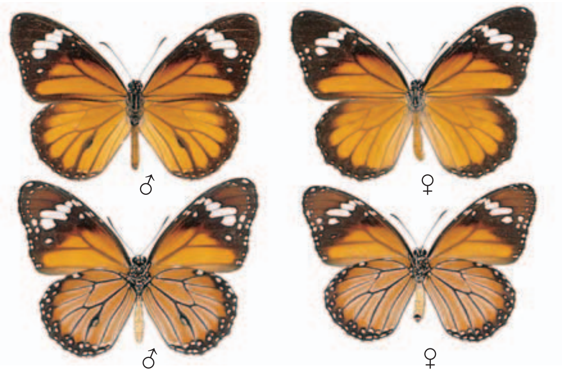
Swamp Tiger *Danaus affinis*



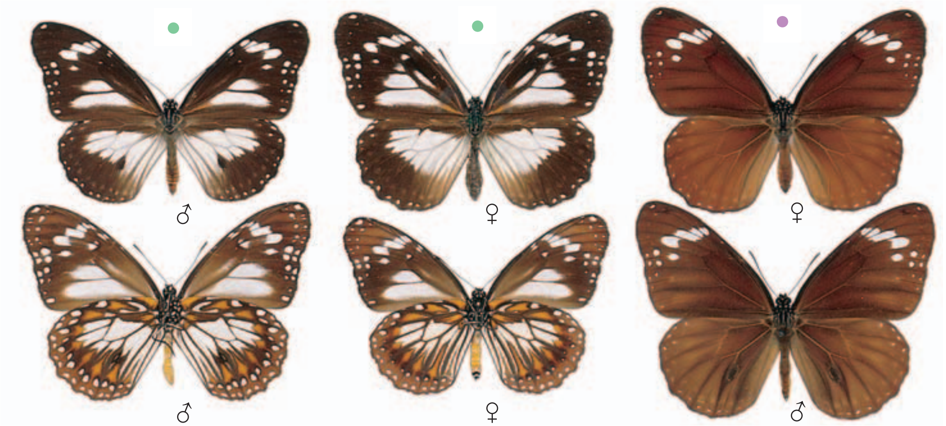
Other names: Marsh Tiger, Black and White Tiger, Brown Tiger. **Wingspan:** ♂ 65 mm, ♀ 62 mm. **Similar species:** none. The mainland subspecies of the Swamp Tiger (*D. a. affinis*) has black and white markings on the upperside. **Variation:** two subspecies. **Behaviour:** adults have a weak and slow flight, keeping within a few metres of the ground; they frequently settle on low vegetation and often feed from flowers; towards dusk they may ascend higher to roost for the night. Several generations completed annually in tropical areas; at least two generations in ne. NSW. Females apparently breed throughout the year. Adults readily disperse outside the breeding habitats and vagrants are occasionally recorded as far south as Sydney. **Habitat:** margins of brackish creeks, paperbark swampland and mangrove in coastal estuarine areas, where the larval food plant grows as a trailing vine among reeds to which it clings for support. **Status:** generally common but local; less common south of Ballina, NSW. **Larval food plant:** *Cynanchum carnosum*.



Lesser Wanderer

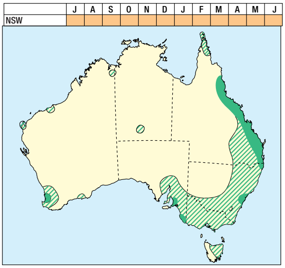


Orange Tiger



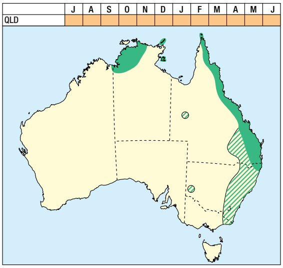
Swamp Tiger

Monarch *Danaus plexippus*



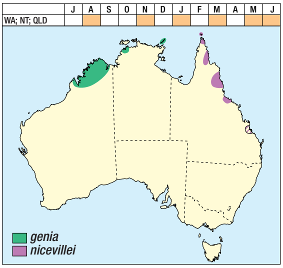
Other names: Wanderer, Milkweed Butterfly. **Wingspan:** ♂ 93 mm, ♀ 92 mm. **Similar species:** none. The Monarch is very large, with narrow FWs. **Behaviour:** adults have a slow, gliding flight. Males tend to patrol around patches of the larval food plant waiting for females. Several generations completed annually in QLD, with females breeding throughout the year in coastal areas; 3–4 generations near Sydney, with adults breeding only during summer. In the more inland and southern temperate areas, populations are not permanently established, with adults dispersing widely to breed temporarily; in late summer-autumn they migrate to overwintering sites in the Hunter Valley and Sydney Basin, NSW, and the Mt Lofty Ranges and near Millicent, SA, where they aggregate for 2–4 months in lightly wooded protected gullies or valleys. **Habitat:** wide variety of habitats; also suburban gardens. **Status:** common but local; introduced to Australia. **Larval food plants:** usually **Asclepias curassavica* in coastal areas of se. QLD and ne. NSW; **Gomphocarpus fruticosa* in se. Australia; also **Asclepias physocarpa*, **Gomphocarpus cancellatus*, **Calotropis gigantea*, **Stapelia grandiflora*, **S. variegata*; very occasionally **Araujia hortorum*.

Blue Tiger *Tirumala hamata*

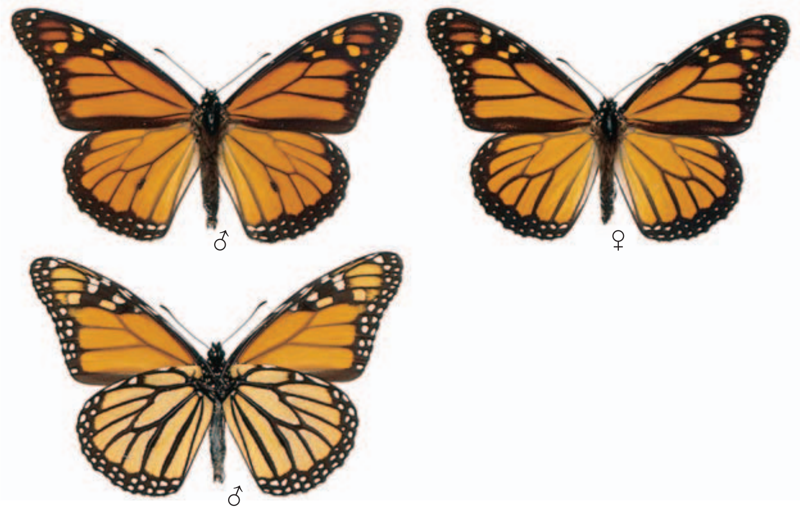


Wingspan: ♂ 72 mm, ♀ 72 mm. **Similar species:** none. The Blue Tiger has numerous pale blue streaks and elongate spots. **Behaviour:** adults usually have a slow, weak flight near the ground. Males readily feed from *Parsonsia*, *Heliotropium* and *Crotalaria* to obtain pyrrolizidine alkaloids; they may also drink from moist sand during the dry season. Possibly only one generation annually, with females breeding for limited period during summer in se. QLD or during the wet season at Darwin when the larval food plants produce new growth. During the long dry season females stop breeding and adults aggregate in large numbers along the north-east coast in sandy gullies or creek banks supporting monsoon forest where they rest on stems, twigs or dead branches in shade close to the ground; adults disperse and migrate in spring, sometimes far outside the normal breeding range. **Habitat:** monsoon forest (vine thicket) and littoral rainforest, where the larval food plants grow as large vines. **Status:** very common and widespread. **Larval food plants:** usually *Secamone elliptica*; also *Marsdenia velutina* in NT; *Cynanchum leptolepis, Heterostemma acuminatum* on Cape York Peninsula, QLD; rarely *C. carnosum*.

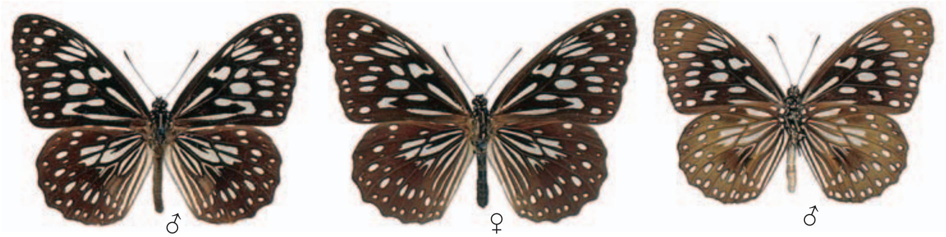
Purple Beak *Libythea geoffroy*



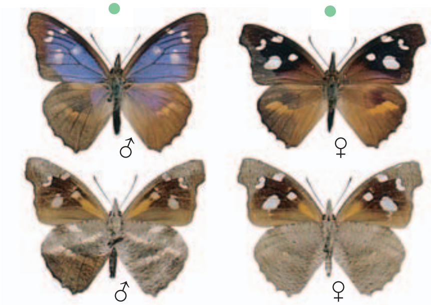
Other name: Australian Beak. **Wingspan:** ♂ 44 mm, ♀ 44 mm. **Similar species:** none. The Purple Beak has the FW apex produced, and the labial palps very long. **Variation:** two subspecies. **Behaviour:** males establish territories by perching on exposed twigs 4–6 m above the ground in gaps in the forest near the larval food plant. Females spend much of their time on the food plant. Possibly only one generation annually, with breeding limited to the first substantial wet season rains when the food plants produce new growth. During the dry season in WA, adults aggregate in large numbers in the dark shade of dry riverbeds and gullies, hanging beneath twigs and leaves of the food plant. **Habitat:** monsoon forest (deciduous vine thicket). **Status:** generally common but very local; less common south of Cape York Peninsula, QLD. **Larval food plants:** *Celtis paniculata*; possibly *C. philippensis, Aphananthe philippinensis*.



Monarch

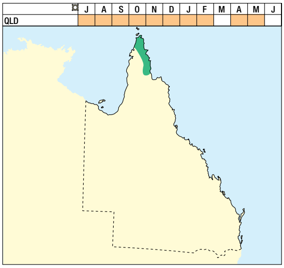


Blue Tiger



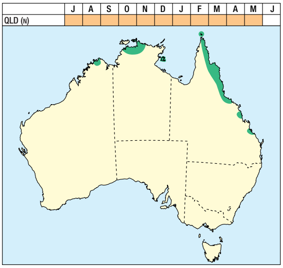
Purple Beak

Harlequin Metalmark *Praetaxila segecia*



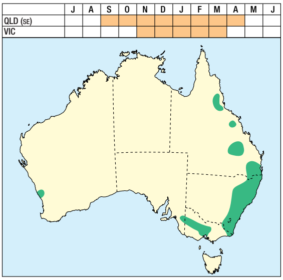
Other name: Australian Harlequin. **Wingspan:** ♂ 42 mm, ♀ 45 mm. **Similar species:** none. The Harlequin Metalmark has a broad white median band on the FW upperside. **Behaviour:** adults are most active during late morning and early afternoon, flying rapidly above the ground in dark shaded areas or sometimes in more open sunlit areas, such as along tracks, within the forest; they also settle amongst leaf litter on the ground and low shrubs for long periods. Probably several generations completed annually. **Habitat:** tropical rainforest, where the larval food plant commonly grows as an understorey tree up to 10 m tall. **Status:** generally uncommon and restricted to Cape York Peninsula, from Cape York to the Rocky River, QLD. **Larval food plant:** *Rapanea porosa*. **Larval attendant ant:** none.

Moth butterfly *Liphyra brassolis*



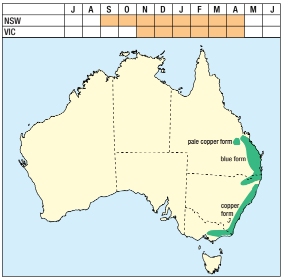
Wingspan: ♂ 71 mm, ♀ 76 mm. **Similar species:** none. The Moth butterfly has the upperside colour orange and dark brown-black. **Variation:** extent of dark brown-black markings on upperside varies seasonally. **Behaviour:** adults fly with a fast, powerful and erratic flight, often around, or high over, trees containing nests of the Green Tree Ant, from midday to dusk but mainly during the afternoon. At least two generations annually. **Habitat:** wide variety of habitats, including mangrove, coastal eucalypt open-forest and gallery forest, wherever nests of the Green Tree Ant are established, preferring more isolated trees with a fairly open crown. **Status:** rarely seen and local. **Larval food.** *Oecophylla smaragdina*.

Bronze Ant-blue *Acrodipsas brisbanensis*



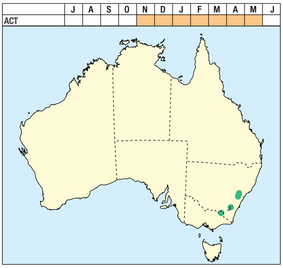
Other name: Large Ant-blue. **Wingspan:** ♂ 22 mm, ♀ 25 mm. **Similar species:** Copper Ant-blue, Golden Ant-blue The Bronze Ant-blue usually has the underside markings narrower and less distinct, the FW termen straighter and apex more pointed, and the FW underside postmedian band, when present, broken and conspicuously displaced at vein M_3. **Behaviour:** adults occasionally feed from flowers, including *Bursaria*. Males regularly hilltop from early to late afternoon, usually on warm to hot, sunny, calm days; they fly very rapidly and perch, with wings closed and head oriented downwards, for long periods on the uppermost leaves and twigs of the tallest tree to establish territories. Probably one generation annually in c. VIC, with adults most abundant in Dec–Jan. **Habitat:** eucalypt open-forest, woodland, open-woodland with a heath understorey and subcoastal heathland, especially in the sandstone areas near Sydney, up to 1000 m; banksia woodland with a shrubby understorey in WA. **Status:** uncommon and very local on hilltops, otherwise rarely seen. **Larval food/attendant ant:** almost certainly *Papyrius* sp. (*nitidus* group).

Copper Ant-blue *Acrodipsas cuprea*

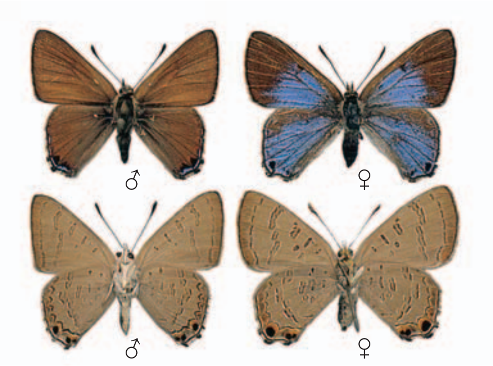


Other name: Cuprea Ant-blue. **Wingspan:** ♂ 23 mm, ♀ 25 mm. **Similar species:** Bronze Ant-blue, Golden Ant-blue. The Copper Ant-blue usually has the underside markings broader and more distinct with prominent white edging, and the FW underside postmedian band straighter; males have the FW upperside copper area, when present, darker and reduced. **Variation:** three geographical forms. **Behaviour:** adults occasionally feed from flowers, including *Leptospermum*. Males strongly hilltop on the summits of steep hills or ridges, usually throughout the afternoon on warm, sunny, calm days; they perch for long periods on twigs or leaves in the mid canopy, about 3–5 m or more above the ground, to establish territories, occasionally flying rapidly around the foliage chasing off intruders. Probably two or more generations annually in coastal se. QLD, with adults most abundant in Sep and again in Mar–Apr. **Habitat:** eucalypt open-forest, where the associated ant occurs on senescent *Acacia* trees. **Status:** common but local on hilltops, otherwise rarely seen. **Larval food/attendant ant:** *Crematogaster*.

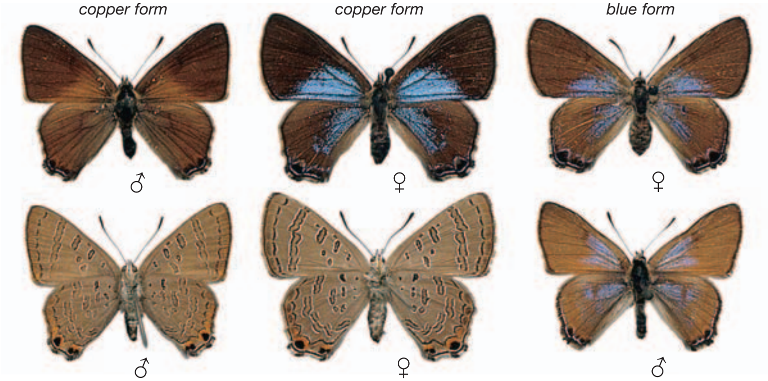
Golden Ant-blue *Acrodipsas aurata*



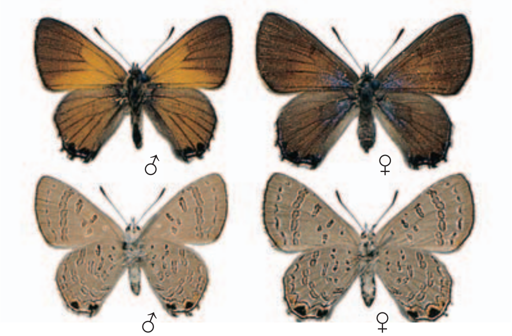
Wingspan: ♂ 22 mm, ♀ 24 mm. **Similar species:** Copper Ant-blue, Bronze Ant-blue. The Golden Ant-blue has the FW termen more rounded, the HW tornus less produced, and the FW underside postmedian band relatively straight with the anterior end near the costa curved closer to the base; males have the FW upperside golden-copper area richer and more extensive. **Behaviour:** males congregate on the summits of hilltops where they perch, with head oriented downwards and wings open or closed, for long periods 2–4 m above the ground on the outer foliage of small trees adjacent to an open area to establish territories. Possibly one generation annually in ACT, with adults most abundant in Nov–Dec, followed by a partial second flight in late summer-autumn in most years. **Habitat:** eucalypt woodland in the central and south-eastern highlands, above 580 m. Occurs from the Blue Mountains, NSW, to Pine Mountain (1060 m) near Corryong, VIC. **Status:** common but very local on hilltops, otherwise rarely seen. **Larval food/attendant ant:** almost certainly *Crematogaster*.



Bronze Ant-blue



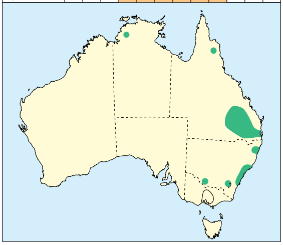
Copper Ant-blue



Golden Ant-blue

Small Ant-blue *Acrodipsas myrmecophila*

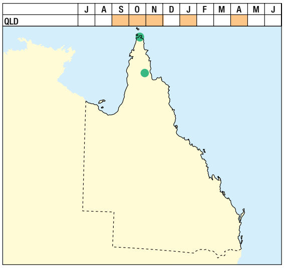
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		
VIC				🟧	🟧	🟧	🟧	🟧	🟧			



Wingspan: ♂ 18 mm, ♀ 20 mm. **Similar species:** Mangrove Ant-blue, Grey Ant-blue, Black Ant-blue, Two-spotted Line-blue. The Small Ant-blue has the underside markings paler and less conspicuous; females have the upperside blue areas tinged with mauve or purplish. It has the FW termen more rounded than in the Grey or Black Ant-blues. Males have the FW underside ground colour grey-brown, rather than orange-brown, with darker bands and spots in the basal area compared to Two-spotted Line-blue females. **Behaviour:** males hilltop during early to mid afternoon on warm, calm, sunny days; they perch for long periods on the outer foliage of trees up to 8 m from the ground to establish territories. Possibly two generations annually in c. VIC. **Habitat:** eucalypt open-forest and grassy open-woodland, from sea level up to 1500 m in ne. NSW, preferring well-drained slopes where the associated ant occurs on dead stumps, logs or at the base of small trees. **Status:** uncommon and very local on hilltops, otherwise rarely seen; threatened in VIC. **Larval food/attendant ant:** *Papyrius* sp. (*nitidus* group).

Grey Ant-blue *Acrodipsas melania*

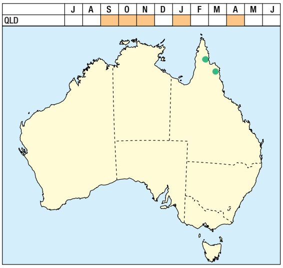
	J	A	S	O	N	D	J	F	M	A	M	J
QLD			🟧	🟧	🟧		🟧			🟧		



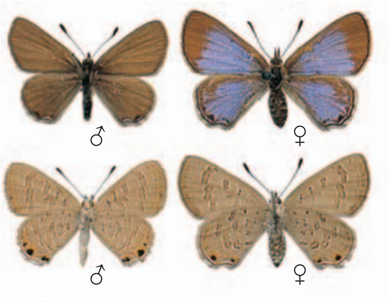
Wingspan: ♂ 17 mm, ♀ 20 mm. **Similar species:** Black Ant-blue, Small Ant-blue, Mangrove Ant-blue. Grey Ant-blue males have the upperside colour greyer, and the FW termen very straight with the apex sharply pointed. Females have the upperside colour bluer, the underside ground colour greyer, with darker and more prominent markings, and a dark grey postmedian band on the HW upperside compared to Small Ant-blue females. **Variation:** extent of pale blue central area on HW upperside varies in females. **Behaviour:** males hilltop, mainly during the mid afternoon, and perch amongst the foliage of the tallest trees, 5–6 m or more above the ground, to establish territories. Number of generations completed annually not recorded; most adults have been collected in the late dry season, from Sep to Nov. **Habitat:** adults have been collected in eucalypt woodland. **Status:** uncommon and very local on hilltops, otherwise rarely seen; restricted to Cape York Peninsula, QLD. **Larval food/attendant ant:** not recorded.

Black Ant-blue *Acrodipsas hirtipes*

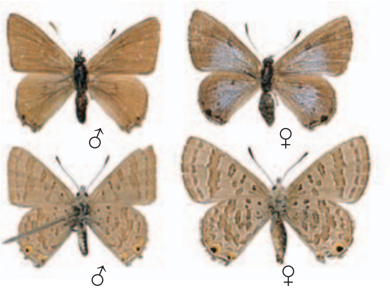
	J	A	S	O	N	D	J	F	M	A	M	J
QLD			🟧	🟧	🟧		🟧			🟧		



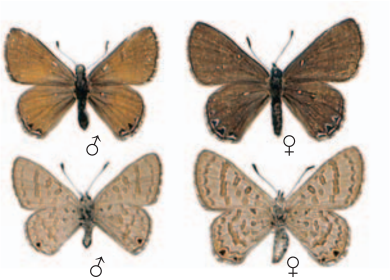
Wingspan: ♂ 17 mm, ♀ 19 mm. **Similar species:** ant-blues. Black Ant-blue males have the upperside colour coppery-brown, with dark brown veins; females have the upperside colour uniformly dull brown-black. Males have the underside ground colour greyer, usually with darker and more prominent markings than in Small Ant-blue males. **Behaviour:** males hilltop from late morning to early afternoon; they perch on foliage at tops of the tallest trees, or about 4 m above the ground when flying together with the Grey Ant-blue. Number of generations completed annually not recorded. **Habitat:** adults have been collected in eucalypt woodland. **Status:** uncommon and very local on hilltops, otherwise rarely seen; restricted to Cape York Peninsula, from Coen to the Palmer River Crossing, QLD. **Larval food/attendant ant:** not recorded.



Small Ant-blue

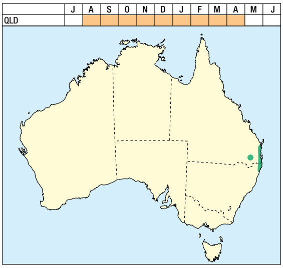


Grey Ant-blue



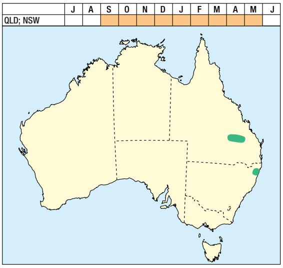
Black Ant-blue

Mangrove Ant-blue *Acrodipsas illidgei*



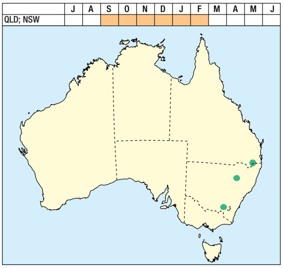
Other name: Illidge's Ant-blue. **Wingspan:** ♂ 22 mm, ♀ 24 mm. **Similar species:** Small Ant-blue, Grey Ant-blue. The Mangrove Ant-blue is larger, and has the underside markings darker and more prominent than in the Small Ant-blue. **Behaviour:** adults seldom fly and are very inconspicuous when settled with wings closed. Males settle at the tops of trees in the breeding habitat. Females very occasionally feed from flowers of *Avicennia*. Possibly two generations annually, with adults more abundant in Sep and from Dec to Feb. **Habitat:** mangrove dominated by *Avicennia marina* or *Rhizophora stylosa*, and woodland in brackish areas adjacent to mangrove dominated by *Casuarina glauca* or *Corymbia* in coastal areas, where the associated ant occurs in dead branches or under bark of older trees; adults have also been collected in eucalypt (ironbark) open-forest on a ridge-top at 460 m just below the main escarpment, and in *Casuarina cristata* swamp inland of the Great Dividing Range, and presumably breed in these habitats as well. **Status:** rare, very local and restricted. **Larval food/attendant ant:** *Crematogaster* sp. (*laeviceps* group).

Black-veined Ant-blue *Acrodipsas arcana*

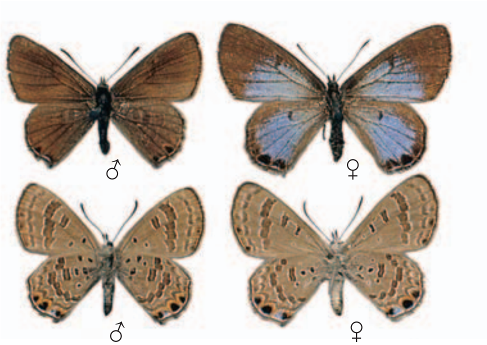


Wingspan: ♂ 21 mm, ♀ 21 mm. **Similar species:** Brown Ant-blue, Black Ant-blue, Mangrove Ant-blue. The Black-veined Ant-blue has the FW termen straighter with the apex more pointed, the HW narrower with the termen less rounded, especially between veins Rs and M_3, and the FW underside postmedian band displaced at vein M_3 and CuA_2 with the posterior end of the band closer to the subterminal band than the anterior end compared to the Brown Ant-blue. **Behaviour:** males fly on prominent hilltops where they establish territories. Number of generations completed annually not recorded. **Habitat:** adults have been collected in eucalypt open-forest on sandstone outcrops. **Status:** uncommon and very local on hilltops, otherwise rarely seen. **Larval food/attendant ant:** not recorded.

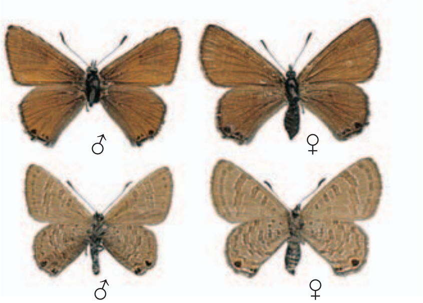
Brown Ant-blue *Acrodipsas mortoni*



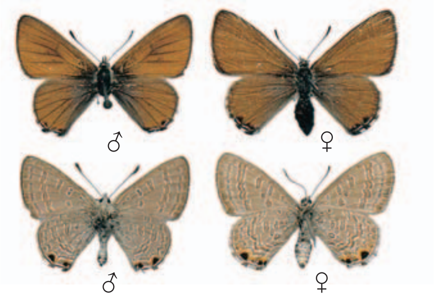
Wingspan: ♂ 21 mm, ♀ 22 mm. **Similar species:** Black-veined Ant-blue, Black Ant-blue. The Brown Ant-blue has the FW termen distinctly convex with the apex more rounded, the HW broader with the termen more rounded, especially between veins Rs and M_3, and the FW underside postmedian band subparallel to the subterminal band compared to the Black-veined Ant-blue. **Behaviour:** adults occasionally feed from flowers of *Eucalyptus*. Males fly on prominent hilltops, usually for only a few hours around midday; they flutter slowly over the crown of the tallest tree for a short period, occasionally settling high up on the foliage for a few minutes before departing. **Habitat:** adults have been collected in eucalypt open-woodland. **Status:** uncommon and very local on hilltops, otherwise rarely seen. **Larval food/attendant ant:** not recorded.



Mangrove Ant-blue



Black-veined Ant-blue

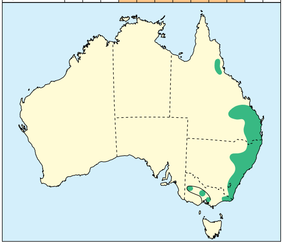


Brown Ant-blue

Fiery Copper *Paralucia pyrodiscus*

Other names: Dull Copper, Eltham Copper. **Wingspan:** ♂ 25 mm, ♀ 27 mm. **Similar species:** Bright Copper, Grassland Copper. **Behaviour:** adults fly during sunshine, with a rapid, jerky flight close to ground near the larval food plant; they frequently bask with wings opened towards the sun, and feed from flowers, especially the food plant. Males perch on low shrubs, the food plant and dry grass, or sometimes on leaf litter, dead twigs and bare ground to establish territories. Two generations annually in w. VIC, with adults flying from late Oct to early Dec and from late Feb to early Apr. **Habitat:** mixed eucalypt woodland and open-forest with an open grassy understorey and patches of stunted shrubs of the larval food plant, preferring dry, exposed, well-drained slopes and ridges, or gullies and gentle slopes in the lower rainfall areas. **Status:** common but very local; vulnerable in c. and w. VIC. **Larval food plants:** *Bursaria spinosa*; also *B. incana* in ne. QLD; *Pittosporum spinescens* in c. QLD. **Larval attendant ants:** usually *Notoncus capitatus*; also *N. gilberti* in ne. QLD; *N. ectatommoides* in w. VIC.

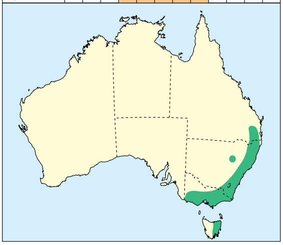
	J	A	S	O	N	D	J	F	M	A	M	J
QLD		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
VIC				🟧	🟧	🟧	🟧	🟧	🟧	🟧		



Bright Copper *Paralucia aurifer*

Wingspan: ♂ 24 mm, ♀ 24 mm. **Similar species:** Fiery Copper, Grassland Copper. **Behaviour:** adults fly with a rapid, jerky flight during sunshine, close to the ground near patches of the larval food plant; they feed from flowers, including the food plant, and frequently bask with wings opened towards the sun; when settled or walking with wings closed, they slowly move the HWs alternately up and down. Males appear to form leks some distance from the breeding areas where they perch on small shrubs, twigs, stones or bare patches on the ground to establish territories. Three or four generations annually in cc. NSW, with adults most abundant in Nov and Feb. **Habitat:** eucalypt open-forest and tall open-forest, from sea level up to 1200 m, preferring drier, well-drained slopes above creeks and gullies where stunted shrubs of the usual larval food plant grow; also edges of rainforest; usually in higher rainfall areas than Fiery Copper. **Status:** common but very local. **Larval food plants:** *Bursaria spinosa*; occasionally *Pittosporum multiflorum* in rainforest. **Larval attendant ant:** *Anonychomyrma* sp. (*nitidiceps* group).

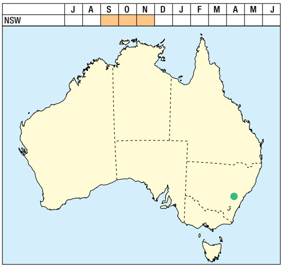
	J	A	S	O	N	D	J	F	M	A	M	J
NSW		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		
TAS				🟧	🟧	🟧	🟧	🟧				

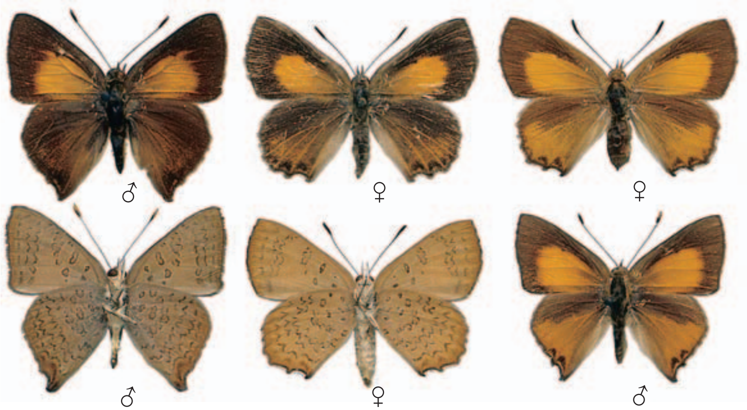


Purple Copper *Paralucia spinifera*

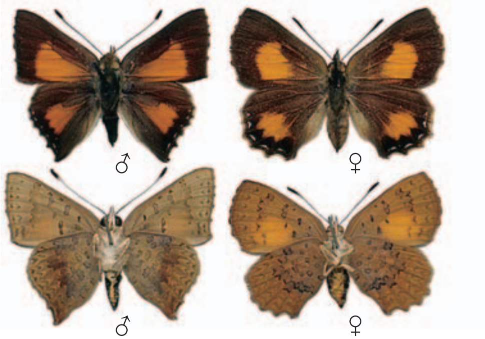
Other name: Bathurst Copper. **Wingspan:** ♂ 19 mm, ♀ 20 mm. **Similar species:** Fringed Heath-blue. The Purple Copper has dark brown markings edged with white on the underside; males have the upperside central areas purple, and the HW tornus slightly produced. **Behaviour:** adults fly slowly during sunshine, within about 1 m of the ground; they feed from flowers and frequently settle on grass or low shrubs, including the larval food plant, and debris on the ground to bask with wings open towards the sun. Males establish territories by perching on grass and foliage of low shrubs. One generation annually, with adults emerging in early spring. **Habitat:** eucalypt woodland with a grassy understorey and stunted shrubs of the larval food plant, 900–1200 m, preferring relatively exposed slopes with west to north-west facing aspect. **Status:** generally common but very local and restricted to the western slopes of the central highlands of NSW; lower risk. **Larval food plant:** *Bursaria spinosa*. **Larval attendant ant:** *Anonychomyrma* sp. (*itinerans* group).

	J	A	S	O	N	D	J	F	M	A	M	J
NSW			🟧	🟧	🟧							

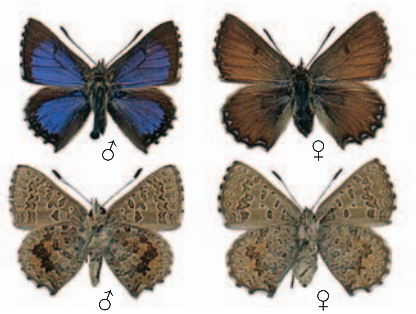




Fiery Copper



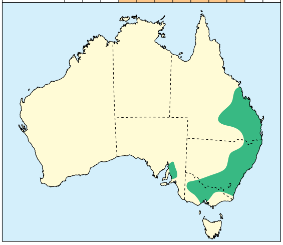
Bright Copper



Purple Copper

Chequered Copper *Lucia limbaria*

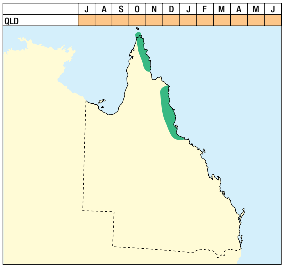
	J	A	S	O	N	D	J	F	M	A	M	J
QLD; NSW; VIC		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	
SA				🟧	🟧	🟧	🟧	🟧	🟧	🟧		



Other names: Small Copper, Grassland Copper. **Wingspan:** ♂ 23 mm, ♀ 25 mm. **Similar species:** Fiery Copper, Bright Copper. The Grassland Copper has the scale-fringe chequered brown and white, the underside ground colour pale whitish-grey, and the HW termen rounded. **Behaviour:** adults fly mainly during the morning in sunshine, very close to the ground; they frequently settle to bask with wings opened, and feed from flowers of daisies and the larval food plant. Males are most active during mid morning when they form leks close to or within the breeding areas; they typically establish territories by perching on the bare ground, or sometimes on stones, leaf litter, grass and herbs; after midday they remain settled, with wings closed, for long periods. Females less active, often perched on herbs or the food plant. Number of generations and seasonal history not fully understood. Populations often sporadic and temporary, and in some seasons/areas adults may be very abundant. **Habitat:** usually native grassland and grassy open-woodland on the plains and slopes inland of the Great Dividing Range, favouring slightly disturbed open areas where the larval food plant grows as a herb; also degraded grassy paddocks, unimproved pastures and rural gardens. **Status:** generally common but local. **Larval food plants:** *Oxalis exilis* in ACT; *O. perennans* in SA. **Larval attendant ants:** *Iridomyrmex* sp. (*gracilis* group), *Iridomyrmex* sp. (*rufoniger* group).

Dark Forest-blue *Pseudodipsas eone*

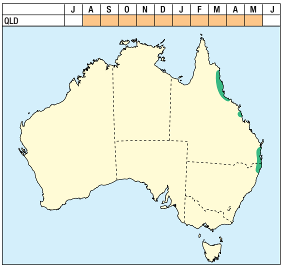
	J	A	S	O	N	D	J	F	M	A	M	J
QLD	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧



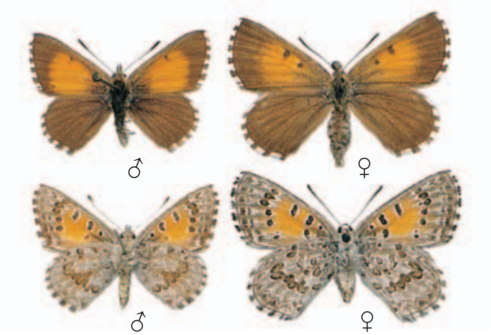
Other name: Eone Blue. **Wingspan:** ♂ 22 mm, ♀ 22 mm. **Similar species:** Bright Forest-blue. The Dark Forest-blue has the underside markings narrower; females have an orange tornal patch on the HW upperside. **Behaviour:** adults fly rapidly, usually from mid morning to early afternoon. Number of generations completed annually not recorded; adults are abundant seasonally, particularly during the wet season in summer on the Paluma Range (700 m), QLD, when the usual larval food plant produces new growth. **Habitat:** rainforest edge and mixed eucalypt tall open-forest with rainforest elements in the understorey, where the usual larval food plant grows as a common scrambling vine. **Status:** common but local. **Larval food plants:** usually *Smilax australis*; also *Clerodendrum costatum, Faradaya splendida, Stenocarpus*; possibly *Guioa acutifolia*. **Larval attendant ant:** *Anonychomyrma gilberti*.

Bright Forest-blue *Pseudodipsas cephenes*

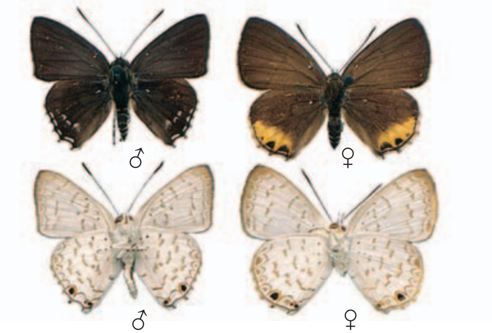
	J	A	S	O	N	D	J	F	M	A	M	J
QLD		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	



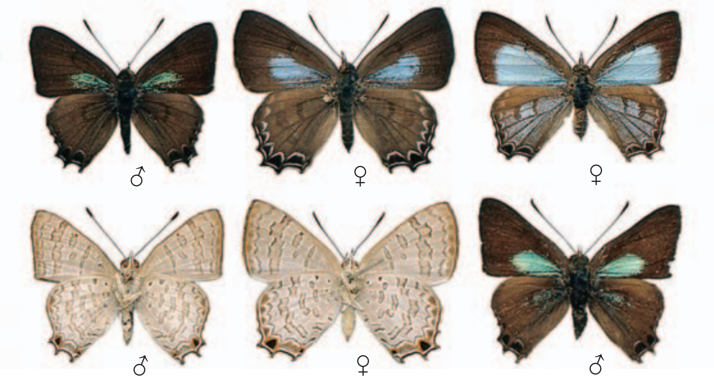
Other name: Cephenes Blue. **Wingspan:** ♂ 23 mm, ♀ 25 mm. **Similar species:** Dark Forest-blue. The Bright Forest-blue has shining greenish-blue or pale blue areas on the upperside, the underside markings broader, and the HW tornal projections more developed. **Variation:** extent of shining greenish-blue or pale blue areas on upperside varies seasonally in southern areas of range. **Behaviour:** adults are usually observed close to the breeding areas. Males settle in sunlit patches, some 6–8 m above the ground. Females usually found lower down close to the larval food plants. Number of generations completed annually not recorded; adults may be abundant seasonally. **Habitat:** upland rainforest and littoral rainforest, preferring the forest edges or regrowth in open areas. **Status:** common but local; lower risk in NSW. **Larval food plants:** usually *Smilax australis*; also *Acacia flavescens, Guioa acutifolia* in ne. QLD; *Diospyros fasciculosa, Halfordia* in se. QLD. **Larval attendant ant:** *Anonychomyrma gilberti*.



Chequered Copper

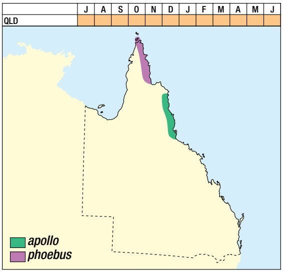


Dark Forest-blue



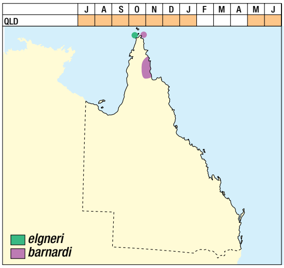
Bright Forest-blue

Apollo Jewel *Hypochrysops apollo*



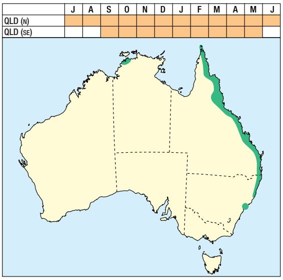
Wingspan: ♂ 34 mm, ♀ 36 mm. **Similar species:** Amethyst Jewel. **Variation:** two subspecies. **Behaviour:** males fly high and rapidly during the afternoon, often settling on the leaves in the canopy of paperbark or trees or mangrove. Females are occasionally seen walking over the tuber of the larval food plant. Number of generations completed annually not recorded; adults have been collected or reared during most months of the year on Cape York Peninsula, but fly from Oct to Apr at Cardwell, QLD; they may be abundant seasonally. **Habitat:** usually lowland paperbark woodland and swampland in coastal areas, where the larval food plants grow as bulbous epiphytes, particularly on the trunks and branches of trees of *Melaleuca viridiflora* or sometimes *Lophostemon suaveolens* and other trees; also mangrove. **Status:** common but very local; lower risk in the Wet Tropics, QLD. **Larval food plants:** *Myrmecodia tuberosa* on Cape York Peninsula; *M. beccarii* in the Wet Tropics. **Larval attendant ant:** *Philidris cordatus*.

Amethyst Jewel *Hypochrysops elgneri*

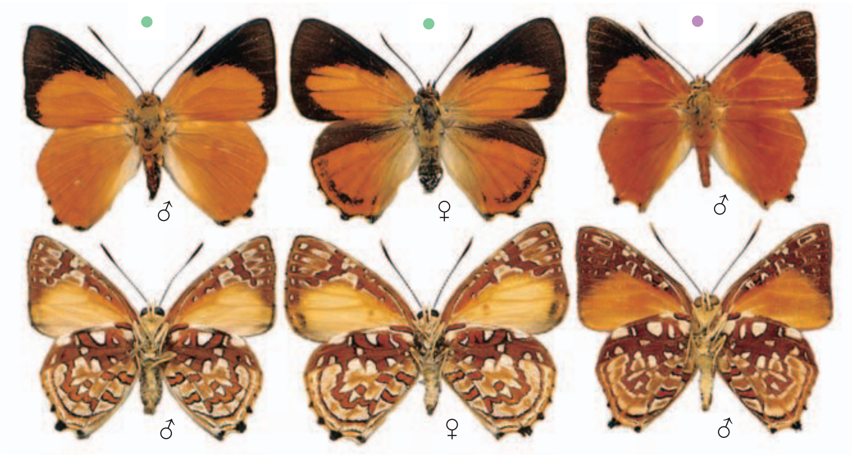


Other name: Elgner's Jewel. **Wingspan:** ♂ 36 mm, ♀ 35 mm. **Similar species:** Apollo Jewel. Amethyst Jewel females have the upperside colour paler orange, and the HW underside ground colour grey, rather than red-brown. **Variation:** two subspecies. **Behaviour:** adults fly rapidly and settle for long periods on trees of *Melaleuca* and *Lophostemon* some distance from the ground. Probably several generations completed annually. **Habitat:** mixed eucalypt-paperbark open-forest and rainforest edge, up to 500 m, where the larval food plants grow. **Status:** rarely seen, very local and restricted to the southern Torres Strait islands and Cape York Peninsula, at Cape York and from Iron Range to the McIlwraith Range north-east of Coen and the Rocky River near Silver Plains, QLD. **Larval food plants:** *Planchonia careya, Nauclea orientalis, Dendrophthoe glabrescens, Notothixos*. **Larval attendant ant:** *Philidris cordatus*.

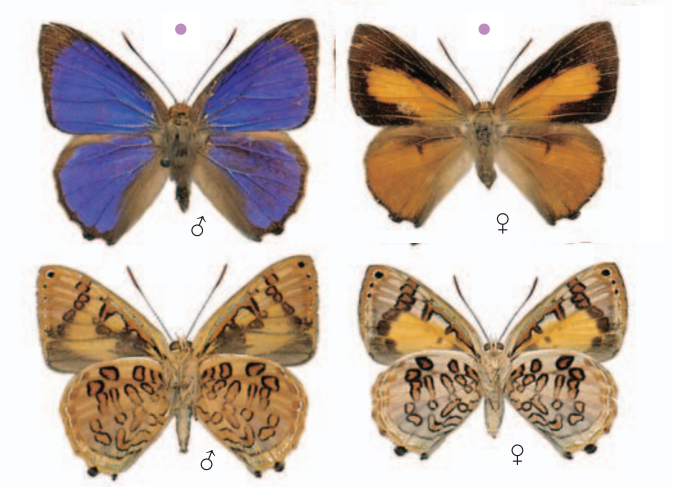
Copper Jewel *Hypochrysops apelles*



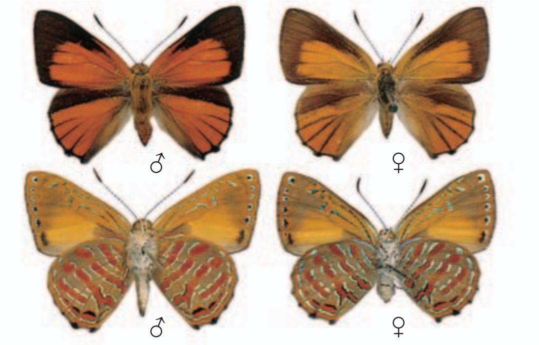
Wingspan: ♂ 28 mm, ♀ 27 mm. **Similar species:** none. The Copper Jewel has the upperside orange, and bright red markings edged with iridescent green on the underside. **Behaviour:** adults are usually observed flying around or settled on or near the larval food plants; they readily feed from flowers of *Avicennia* and *Aegiceras* in se. QLD. Males fly mainly during the late afternoon and frequently perch on the leaves of shrubs and trees to establish territories. Number of generations completed annually not recorded; adults are abundant seasonally in both the tropics and subtropics, but the timing varies within and between years. **Habitat:** mangrove in NT and areas south of Townsville, QLD; mangrove and subcoastal savannah woodland in areas north of Townsville; rainforest edge on coastal sand dunes in the Torres Strait islands and Cape York Peninsula, QLD. **Status:** common but very local; lower risk in NSW. **Larval food plants:** mangrove (*Rhizophora, Bruguiera, Ceriops, Avicennia, Lumnitzera*) in coastal areas; shrubs and small trees (*Terminalia, Petalostigma, Vandasina, Barringtonia, Planchonia, Acacia, Angophora, Eucalyptus, Alphitonia, Commersonia*) in subcoastal areas of ne. QLD. **Larval attendant ant:** *Crematogaster* sp. (*laeviceps* group).



Apollo Jewel

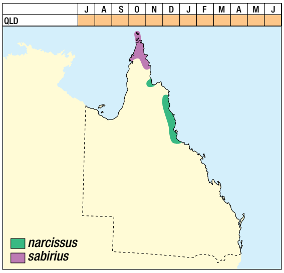


Amethyst Jewel



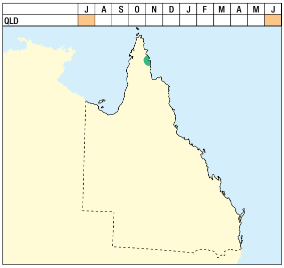
Copper Jewel

Narcissus Jewel *Hypochrysops narcissus*



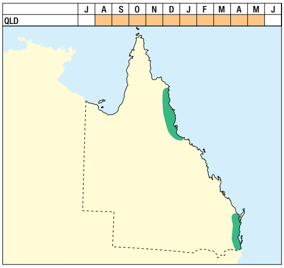
Wingspan: ♂ 28 mm, ♀ 28 mm. **Similar species:** Splendid Jewel. The Narcissus Jewel has the HW underside red postmedian band curved and more broken, and a dull red postmedian band on the FW underside. **Variation:** two subspecies. **Behaviour:** adults fly rapidly in and above the canopy of mangrove and paperbarks in the afternoon; they readily feed from flowers of *Melaleuca* and other plants, such as the epiphyte *Dischidia* growing on trunks of *Melaleuca viridiflora*. Males perch in sunlit patches on the outer foliage of trees up to 12 m from the ground during the late afternoon to establish territories; when settled they may bask with wings slightly opened towards the sun. Number of generations completed annually not recorded. **Habitat:** usually mangrove and paperbark woodland and swampland in coastal lowlands; also lowland rainforest on northern Cape York Peninsula, QLD. **Status:** common but local. **Larval food plants:** usually mangrove (*Ceriops, Aegiceras, Avicennia, Lumnitzera, Rhizophora, Bruguiera*); also shrubs and small trees (*Terminalia, Lophostemon*), and mistletoes (*Dendrophthoe, Diplatia, Notothixos*). **Larval attendant ant:** *Philidris cordatus*.

Splendid Jewel *Hypochrysops cleon*

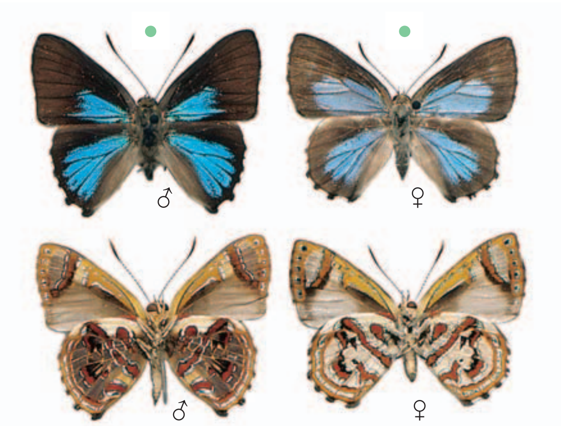


Wingspan: ♂ 26 mm, ♀ 25 mm. **Similar species:** Coral Jewel, Narcissus Jewel. The Splendid Jewel has the HW underside orange-red bands straighter and more continuous. Males have the upperside colour brighter purplish-blue, and the FW termen straighter compared to Coral Jewel males. **Behaviour:** males have been collected settled about 8–10 m above the ground on small trees growing in open-woodland on ridges adjacent to rainforest. Females are rarely seen; a few have been collected settled on foliage about 2 m from the ground along roadside vegetation. **Habitat:** adults have been collected in or adjacent to tropical rainforest. **Status:** apparently rare, local and restricted to Iron Range on Cape York Peninsula, QLD. **Larval food plant:** not recorded. **Larval attendant ant:** not recorded.

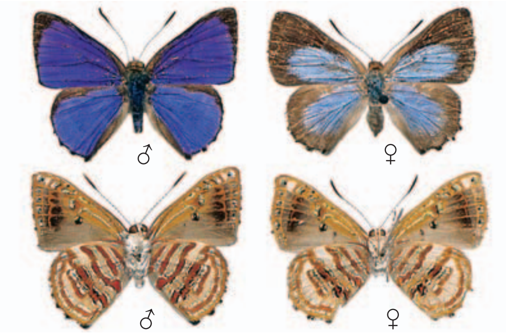
Coral Jewel *Hypochrysops miskini*



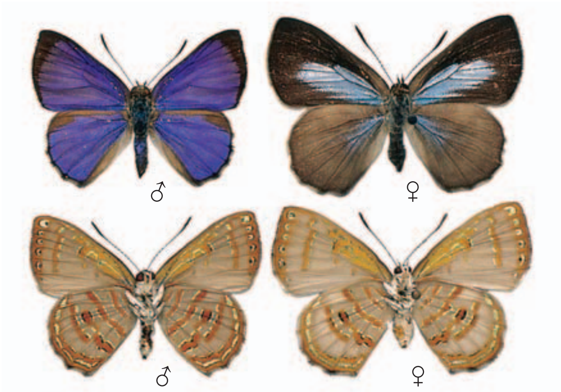
Other name: Miskin's Jewel. **Wingspan:** ♂ 27 mm, ♀ 27 mm. **Similar species:** Splendid Jewel. The Coral Jewel has the HW underside orange-red median and postmedian bands paler, curved, and less distinctly edged with iridescent green; males have the upperside colour duller purplish-blue, and the FW termen more convex. **Variation:** extent of pale blue areas on HW upperside varies in females, especially in n. QLD. **Behaviour:** males are rarely seen; they fly high in the forest canopy, and settle on the outer foliage of trees about 12 m from the ground during the mid to late afternoon. Females fly closer to the ground near the larval food plants and frequently settle on low shrubs. Probably several generations completed annually in ne. QLD, with adults more abundant during the wet season. **Habitat:** rainforest and mixed eucalypt tall open-forest with rainforest elements, including the larval food plants, in the understorey, mainly upland areas in ne. QLD. **Status:** common but local. **Larval food plants:** usually *Smilax australis*; also *Glochidion, Melastoma, Tetrasynandra, Maesa, Eucalyptus, Lophostemon, Rhodomyrtus, Guioa, Commersonia, Faradaya* in ne. QLD. **Larval attendant ant:** *Anonychomyrma gilberti*.



Narcissus Jewel

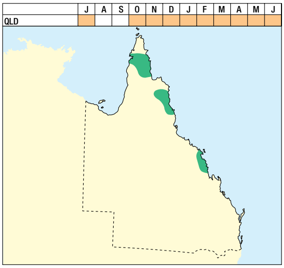


Splendid Jewel



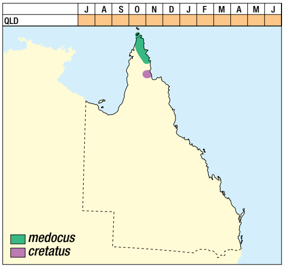
Coral Jewel

Royal Jewel *Hypochrysops polycletus*



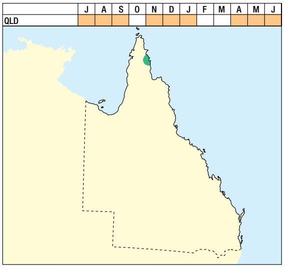
Other name: Rovena Jewel. **Wingspan:** ♂ 27 mm, ♀ 27 mm. **Similar species:** none. The Royal Jewel has the HW termen produced at the end of vein CuA$_1$. **Behaviour:** adults fly in the breeding areas. Females usually observed close to the larval food plant. Probably several generations completed annually, with adults most abundant during or soon after the wet season, from April to June, when the food plant produces copious new soft foliage. Breeding appears to occur throughout the year, even though most plants drop their leaves during the winter dry season, larger vines may continue to produce new foliage. **Habitat:** monsoon forest (deciduous vine thicket), where the larval food plant grows commonly as a woody climber. **Status:** common but local. **Larval food plant:** *Rhyssopterys timorensis*. **Larval attendant ant:** occasionally *Camponotus* sp. (*extensus* group).

Green-banded Jewel *Hypochrysops theon*

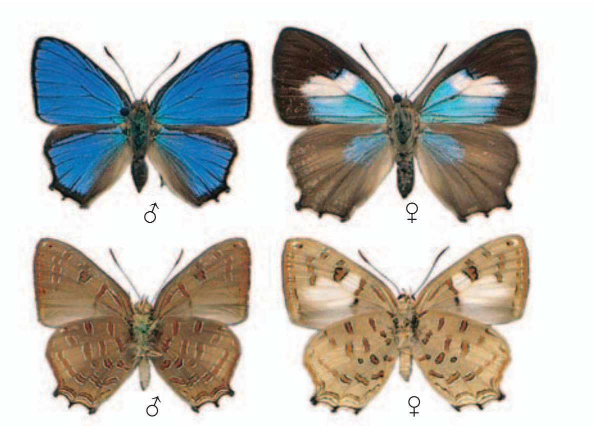


Other name: Theon Jewel. **Wingspan:** ♂ 31 mm, ♀ 36 mm. **Similar species:** Paradise Jewel. The Green-banded Jewel has the two black central bands on the HW underside further apart, and scarcely edged with iridescent green, with the outer band extending from vein M$_3$ to the dorsum. **Variation:** two subspecies. **Behaviour:** adults fly in the dark understorey of the forest. Males frequently settle on foliage 2–3 m from the ground in sunlit patches around midday. Females are usually observed settled on fronds of the larval food plants, moving the HWs alternately up and down, or walking lower down on the rhizomes. Probably several generations completed annually. **Habitat:** lowland tropical rainforest, where the larval food plants grow as ferns attached to boulders or tree trunks within a few metres above the ground. **Status:** common but local and restricted to the southern Torres Strait islands and Cape York Peninsula, QLD. **Larval food plants:** *Drynaria quercifolia, Platycerium hillii*. **Larval attendant ant:** *Philidris cordatus*.

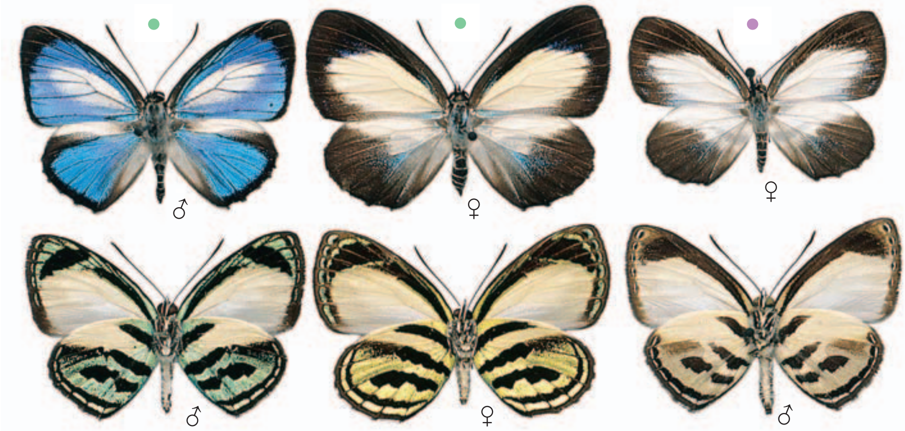
Paradise Jewel *Hypochrysops hippuris*



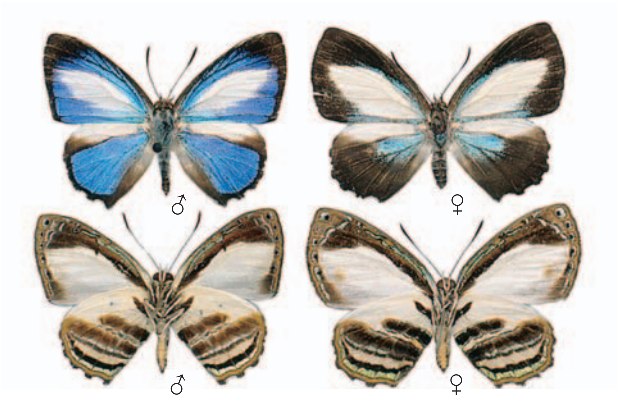
Wingspan: ♂ 29 mm, ♀ 30 mm. **Similar species:** Green-banded Jewel. The Paradise Jewel has the two black central bands on the HW underside closer together, and more conspicuously edged with iridescent green, with the outer band extending from the apex to the dorsum. **Behaviour:** males fly rapidly; during mid to late morning they hilltop on the summits of drier hills and ridges within the forest, preferring the edges of small clearings or openings where they perch for long periods on the foliage of trees about 2–6 m above the ground to establish territories. Females have been observed along tracks or laying eggs on the larval food plant, usually around midday. Probably several generations completed annually. **Habitat:** tropical rainforest, where the larval food plant grows as a fern on trees. **Status:** uncommon, local and restricted to Iron Range on Cape York Peninsula, QLD. **Larval food plant:** *Pyrrosia lanceolata*. **Larval attendant ant:** *Philidris cordatus*.



Royal Jewel

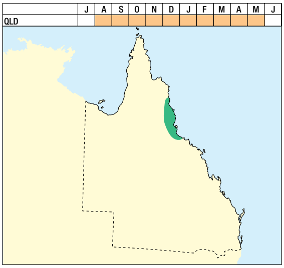


Green-banded Jewel



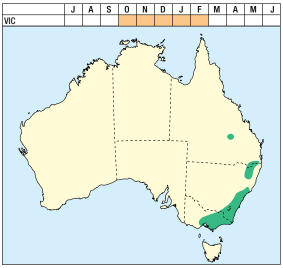
Paradise Jewel

Peacock Jewel *Hypochrysops pythias*



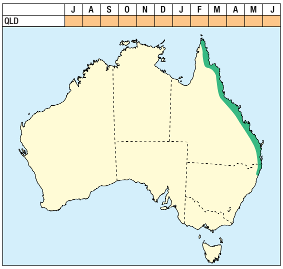
Wingspan: ♂ 26 mm, ♀ 28 mm. **Similar species:** none. The Peacock Jewel has broad orange-red bands and spots on the underside, each broadly edged with iridescent green. **Variation:** iridescent areas on upperside either bright blue or various shades of purple in females. **Behaviour:** males fly high in the forest canopy and settle on the outer foliage of trees, including the larval food plant. Probably several generations completed annually. **Habitat:** edges of tropical rainforest, from sea level to 900 m, where the usual larval food plant grows as a small tree up to 12 m. **Status:** generally uncommon, very local and restricted to the Wet Tropics, QLD. **Larval food plants:** usually *Commersonia bartramia*; also *Trichospermum pleiostigma* in lowland areas. **Larval attendant ant:** none.

Yellow Jewel *Hypochrysops byzos*

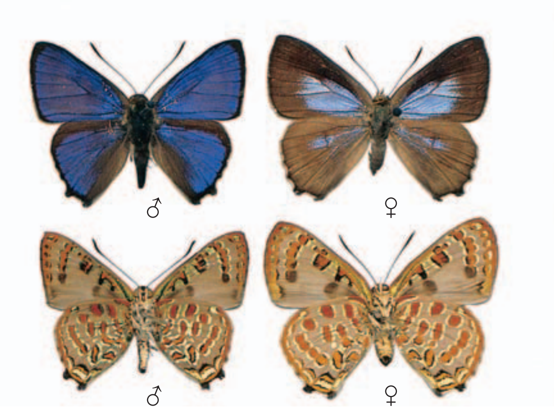


Other name: Yellow-spot Jewel. **Wingspan:** ♂ 26 mm, ♀ 28 mm. **Similar species:** none. Yellow Jewel females have the underside ground colour yellow; males have an orange-red tornal streak on the HW upperside. **Behaviour:** adults fly rapidly during sunshine, in the afternoon. Males are most active during mid to late afternoon, and perch on prominent leaves or an inflorescence near the top of the breeding trees to establish territories; when settled they may bask, with the wings slightly opened towards the sun. Females usually observed on the food plant, walking over the leaves and stems, laying eggs, or basking. Possibly only one or two generations completed annually in VIC, with adults emerging from late Oct. Populations fluctuate and expand/contract from year to year, and in some years adults may be very abundant. **Habitat:** eucalypt open-forest on the coast and tablelands in NSW, where the usual larval food plant grows as a small shrub on sandstone; eucalypt tall open-forest in ACT and VIC, preferring cool montane areas (up to 1000 m) where the food plant grows commonly as an understorey tree; also lowland riparian open-forest near Melbourne. **Status:** generally uncommon and local. **Larval food plants:** usually *Pomaderris lanigera* in QLD and NSW; *P. aspera* in ACT and VIC; also *P. andromedifolia, P. cotoneaster, P. eriocephala, P. ferruginea, P. intermedia*; *Commersonia fraseri* in cc. NSW; *Rulingia salviifolia* at Mt Warning, NSW. **Larval attendant ant:** none.

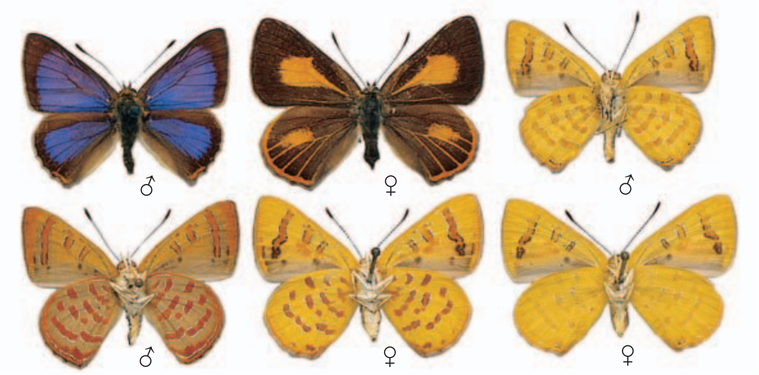
Silky Jewel *Hypochrysops digglesii*



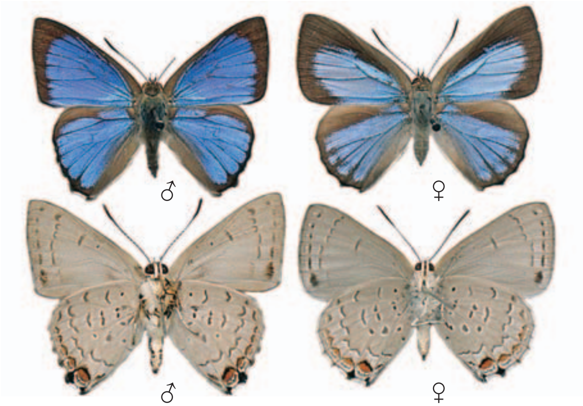
Other name: Diggles' Blue. **Wingspan:** ♂ 29 mm, ♀ 31 mm. **Similar species:** none. The Silky Jewel has the underside ground colour dull grey, without iridescent blue-green markings. **Variation:** extent of blue on HW upperside varies in females. **Behaviour:** adults have been observed during the afternoon on clumps of the larval food plant or feeding from flowers of *Grevillea* and *Callistemon*; they are very inconspicuous. Probably several generations completed annually. **Habitat:** eucalypt open-forest and savannah woodland in coastal and subcoastal areas, where the mistletoe food plants grow as parasitic shrubs on eucalypts and other trees. **Status:** rarely seen and local. **Larval food plants:** *Amyema bifurcata, A. conspicua, A. miquelii, A. sanguinea, Dendrophthoe curvata, D. glabrescens, D. homoplastica, D. vitellina, Muellerina celastroides*. **Larval attendant ants:** *Crematogaster* sp. (*australis* group), *Crematogaster* sp. (*laeviceps* group).



Peacock Jewel



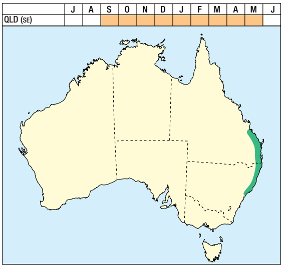
Yellow Jewel



Silky Jewel

Mangrove Jewel *Hypochrysops epicurus*

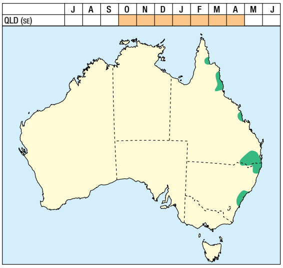
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	



Other name: Dull Jewel. **Wingspan:** ♂ 27 mm, ♀ 29 mm. **Similar species:** Fiery Jewel, Cyane Jewel, Bulloak Jewel. The Mangrove Jewel has the underside spots and bands pale orange, or rarely pale orange-red; males have the upperside iridescent purple areas duller. **Behaviour:** adults fly rapidly around and settle on the breeding trees during the afternoon; they readily feed from flowers of *Avicennia* and *Aegiceras*. Males perch on outer foliage near the tops of the breeding trees during mid to late afternoon to establish territories; when settled they face an open area, with wings closed or partly opened and head oriented slightly downwards. Two generations annually at Redland Bay, QLD, with adults most abundant in Nov and Feb. **Habitat:** mangrove, preferring larger, older trees with colonies of the attendant ant in hollow branches and trunk, usually on the landward edge with some shade provided by trees of *Casuarina* and *Melaleuca*. **Status:** common but very local. **Larval food plant:** *Avicennia marina*. **Larval attendant ants:** *Anonychomyrma* sp. (*itinerans* group), *Anonychomyrma* sp. (*nitidiceps* group).

Cyane Jewel *Hypochrysops cyane*

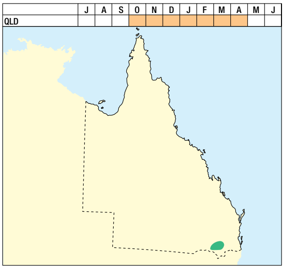
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)				🟧	🟧	🟧	🟧	🟧	🟧	🟧		



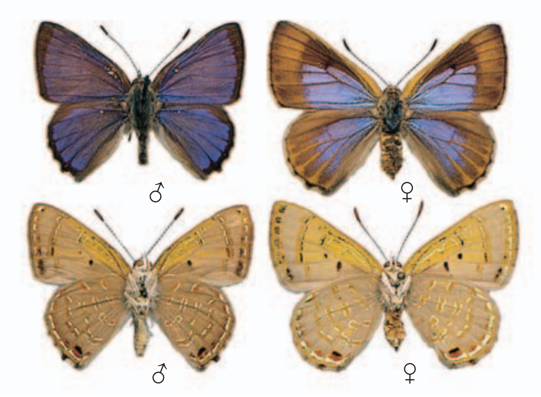
Wingspan: ♂ 27 mm, ♀ 29 mm. **Similar species:** Fiery Jewel, Mangrove Jewel, Bulloak Jewel. The Cyane Jewel has the HW underside orange-red spots and bands narrower. **Behaviour:** adults fly and settle around the tops of breeding trees, often 10 m or more above the ground; they are attracted to flowers. Males fly rapidly during the mid to late afternoon when conditions are hot and sunny; they sometimes frequent hilltops. Two generations annually in se. QLD and NSW, with adults emerging in Oct–Nov and again in Jan–Feb. **Habitat:** open-forest and woodland; preferring older, larger trees in excess of 20 m with colonies of the attendant ant in hollow branches and trunk when breeding on *Angophora*. **Status:** uncommon and local. **Larval food plants:** *Terminalia subacroptera, Acacia humifusa, Lophostemon grandiflorus, Melaleuca leucodendra, Alphitonia obtusifolia* in n. QLD; *Angophora costata* in se. QLD; *Eucalyptus moluccana* near Sydney, NSW; occasionally *Amyema miquelii*. **Larval attendant ants:** *Anonychomyrma* sp. (*itinerans* group), *Anonychomyrma* sp. aff. *gilberti*.

Bulloak Jewel *Hypochrysops piceata*

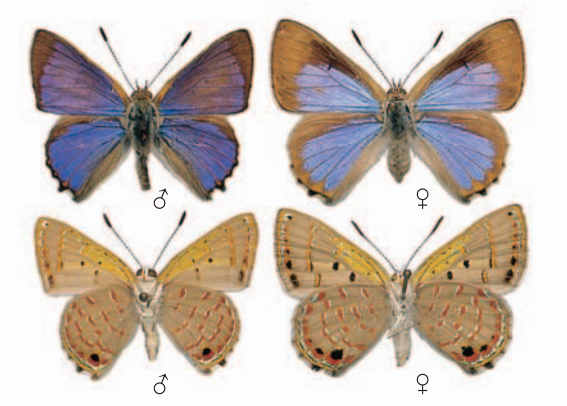
	J	A	S	O	N	D	J	F	M	A	M	J
QLD				🟧	🟧	🟧	🟧	🟧	🟧	🟧		



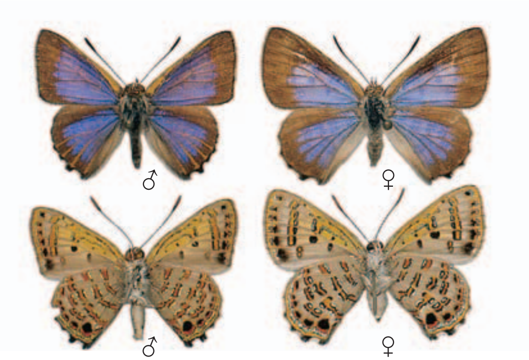
Other names: Darling Downs Jewel, Piceatus Jewel. **Wingspan:** ♂ 23 mm, ♀ 25 mm. **Similar species:** Fiery Jewel, Cyane Jewel, Mangrove Jewel. The Bulloak Jewel has the HW underside orange-red spots and bands edged with black; males have the upperside termen broadly brown-black. **Behaviour:** males perch for long periods, with wings closed or partly opened, near the tops and outer branches of the breeding trees, about 8–15 m above the ground, to establish territories during the early to late afternoon. Females fly less rapidly and settle in shaded, less prominent positions lower down on the larval food plant towards late afternoon. Two generations annually, with adults usually emerging in Oct–Nov and again in Jan–Feb. **Habitat:** bulloak or mixed bulloak woodland on sandy soils, preferring very old, large trees with colonies of the attendant ant in hollow branches and trunk. **Status:** uncommon, very local and restricted to inland areas west of the Darling Downs, QLD; endangered. **Larval food plant:** *Allocasuarina luehmannii*. **Larval attendant ant:** *Anonychomyrma* sp. (*itinerans* group).



Mangrove Jewel



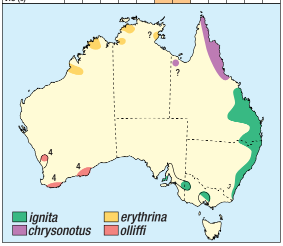
Cyane Jewel



Bulloak Jewel

Fiery Jewel *Hypochrysops ignita*

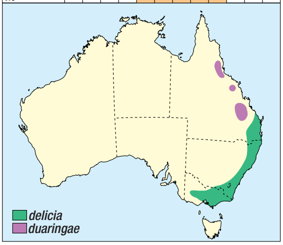
	J	A	S	O	N	D	J	F	M	A	M	J
NSW (cc)				🟧	🟧	🟧	🟧	🟧	🟧	🟧		
VIC (c)						🟧	🟧					



Other name: Dingy Jewel. **Wingspan:** ♂ 26 mm, ♀ 27 mm. **Similar species:** Cyane Jewel, Bulloak Jewel, Mangrove Jewel. The Fiery Jewel has the HW underside orange-red spots and bands broader. Males have the FW underside termen orange, rather than grey, and the FW upperside costa narrowly black, rather than purple, compared to Cyane Jewel males. **Variation:** four subspecies, each variable. **Behaviour:** males fly rapidly during the early and mid afternoon, and frequently hilltop, perching on a leaf or twig about 3–5 m from the ground to establish territories. Females fly more slowly, usually observed on the larval food plant. Probably two generations annually in SA, with adults emerging in Nov–Dec and again in Feb–Mar; one generation in sw. WA, with adults flying from Oct to Dec. **Habitat:** wide variety of habitats, particularly drier eucalypt woodlands, open-woodlands and heathlands where colonies of the attendant ant are established. **Status:** common but local; lower risk in VIC, SA and WA. **Larval food plants:** wide variety of native and introduced species of shrubs representing 17 families. **Larval attendant ant:** *Papyrius* sp. (*nitidus* group).

Moonlight Jewel *Hypochrysops delicia*

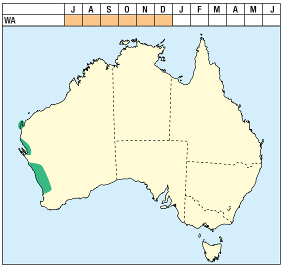
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		
VIC					🟧	🟧	🟧	🟧	🟧			



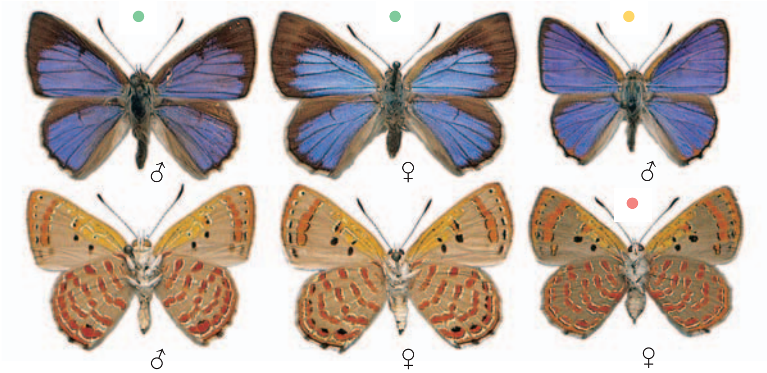
Other names: Blue Jewel, Moonlight Blue. **Wingspan:** ♂ 32 mm, ♀ 35 mm. **Similar species:** none. The Moonlight Jewel has the upperside central areas iridescent green or blue. **Variation:** two subspecies, both variable. **Behaviour:** males fly rapidly during the late afternoon in hot sunshine, though may start flying soon after midday on cooler days; they establish territories by flying around and perching on the outermost branches at the tops of breeding trees, or by visiting hilltops where they perch on the outer foliage near the crown of the tallest trees, up to 12 m above the ground. Females usually observed walking slowly along branches of the larval food plant. Two generations annually at Sydney, with adults emerging from late Oct to early Dec and again in Feb–Mar. **Habitat:** drier eucalypt open-forests and woodlands on the coast, tablelands and slopes and foothills of and near the Great Dividing Range, usually preferring old, large trees with colonies of the attendant ant in borer holes inside trunk and branches. **Status:** common but very local. **Larval food plants:** usually *Acacia*; also *Alphitonia excelsa* in c. QLD. **Larval attendant ant:** *Crematogaster*.

Turquoise Jewel *Hypochrysops halyaetus*

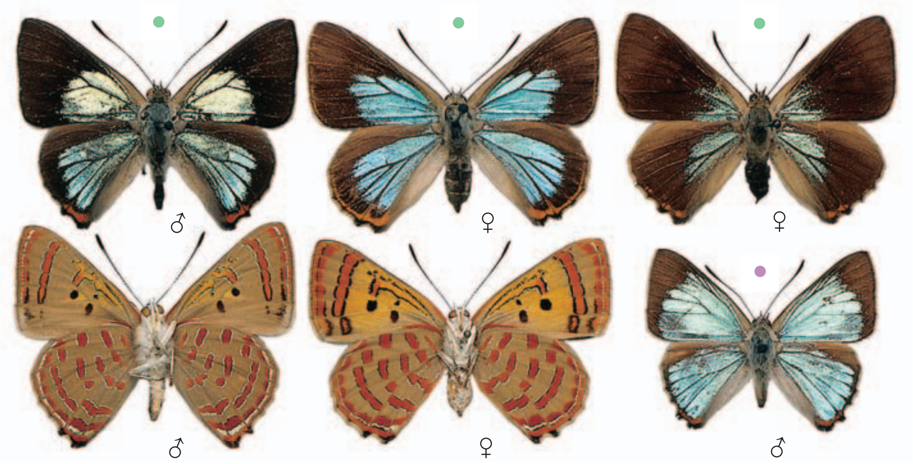
	J	A	S	O	N	D	J	F	M	A	M	J
WA	🟧	🟧	🟧	🟧	🟧	🟧						



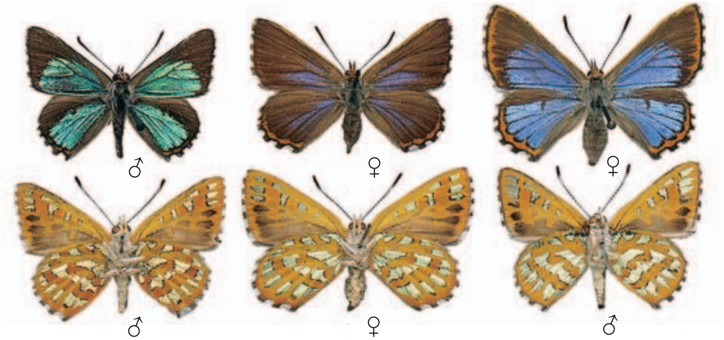
Other name: Western Jewel. **Wingspan:** ♂ 25 mm, ♀ 27 mm. **Similar species:** none. The Turquoise Jewel has broad iridescent pale green spots on the HW underside. **Variation:** extent and colour of iridescent purple or bluish-purple areas on upperside varies geographically in females. **Behaviour:** adults fly near the ground around wattles, and feed from flowers. Males fly rapidly in more open areas where they establish territories. Probably one generation annually, with adults flying for only a few weeks at any location; they emerge up to three months earlier in northern areas (Jul–Aug) than near Perth (late Oct–early Nov). **Habitat:** open-heath on coastal sand dunes and mixed banksia woodland. **Status:** common but local; lower risk near Perth. **Larval food plants:** *Jacksonia sternbergiana, Acacia xanthina, Daviesia daphnoides, D. divaricata*. **Larval attendant ant:** *Crematogaster* sp. (*perthensis* group).



Fiery Jewel

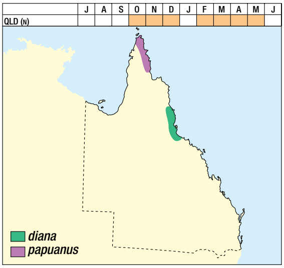


Moonlight Jewel



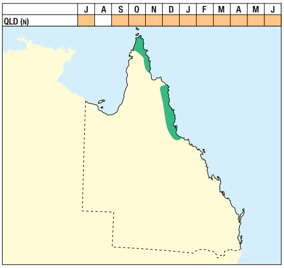
Turquoise Jewel

Large Moonbeam *Philiris diana*



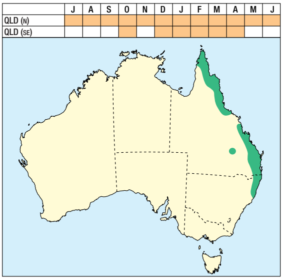
Other name: Diana Moonbeam. **Wingspan:** ♂ 28 mm, ♀ 30 mm. **Similar species:** Purple Moonbeam, Shining Pencil-blue. Large Moonbeam males are larger, and have the FW upperside brown-black terminal line narrower than in Purple Moonbeam males. Females have the underside pattern uniformly white, without faint brown-black markings, compared to Shining Pencil-blue females. **Variation:** two subspecies. **Behaviour:** males have been noted to settle on trees of *Melaleuca*, some distance from the ground, along edges of the forest. Females have been observed feeding at blossom. Probably several generations completed annually; immature stages may be abundant seasonally. **Habitat:** ecotone between rainforest and eucalypt open-woodland on Cape York Peninsula, QLD, where suckers or seedlings of the larval food plant are regenerating. **Status:** rarely seen and local. **Larval food plants:** *Litsea breviumbellata* on Cape York Peninsula; *Litsea* sp. in the Wet Tropics, QLD. **Larval attendant ant:** none.

Bicolour Moonbeam *Philiris fulgens*

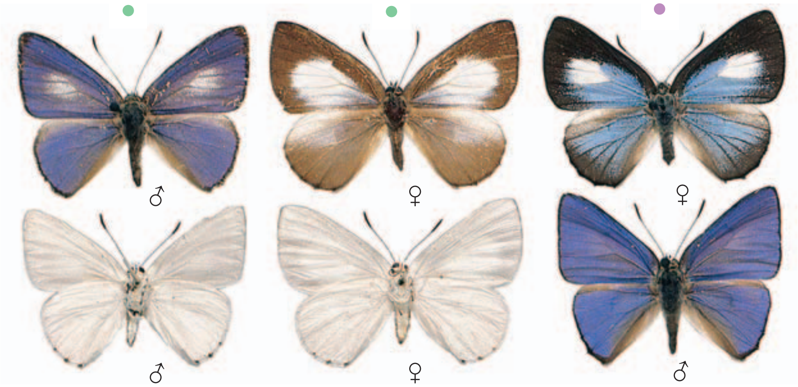


Other name: Purple Moonbeam. **Wingspan:** ♂ 25 mm, ♀ 26 mm. **Similar species:** none. Bicolour Moonbeam males have the upperside colour purple on the FW and blue on the HW. **Variation:** extent of blue areas on upperside varies in females. **Behaviour:** adults fly rapidly and usually stay close to the breeding areas. Males are usually most active during the afternoon; they often perch high up on overhanging branches or other spots, 3–7 m above the ground, to establish territories. Females usually observed flying along the margins or in the understorey of the forest, searching for suitable food plants; they are most active from late morning to early afternoon. Number of generations completed annually not recorded. **Habitat:** tropical rainforest, favouring very moist, shady areas such as along creeks where the larval food plants grow. Occurs from Cape York to the Rocky River, and from Isabella Falls near Cooktown to Bluewater State Forest west of Townsville, QLD. **Status:** generally uncommon and local. **Larval food plants:** *Litsea breviumbellata* on Cape York Peninsula; *L. leefeana, Cryptocarya mackinnoniana, C. murrayi, Endiandra hypotephra* in the Wet Tropics, QLD. **Larval attendant ant:** none.

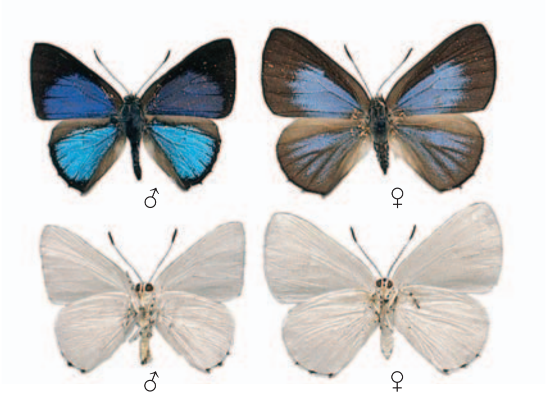
Purple Moonbeam *Philiris innotatus*



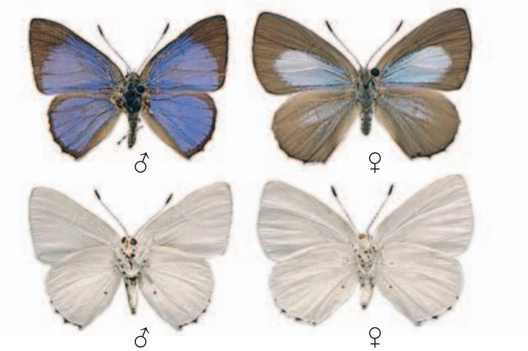
Other name: Common Moonbeam. **Wingspan:** ♂ 22 mm, ♀ 24 mm. **Similar species:** Large Moonbeam, Azure Moonbeam. Purple Moonbeam males have the FW upperside brown-black terminal band broader than in Large Moonbeam males. They have the upperside colour darker blue, and the HW upperside black terminal line broader than in Azure Moonbeam males. **Variation:** extent of pale blue central areas on upperside very variable in females. **Behaviour:** adults fly around and settle on the larval food plant. Probably several generations completed annually, with adults more abundant during the late wet season and early dry season. **Habitat:** lowland rainforest in wet coastal areas and monsoon forest (including riparian vine thicket) along creeks and rivers in the drier subcoastal areas, where the usual larval food plant grows. **Status:** common but local. **Larval food plants:** usually *Ficus opposita* in QLD; *F. coronata* in NSW; occasionally *F. congesta, *Ficus benghalensis, *F. carica*. **Larval attendant ants:** very occasionally *Crematogaster, *Technomyrmex*.



Large Moonbeam

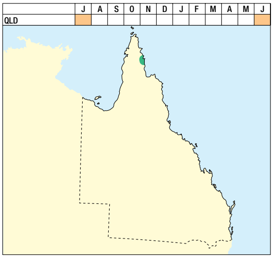


Bicolour Moonbeam



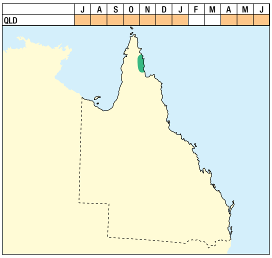
Purple Moonbeam

Azure Moonbeam *Philiris azula*



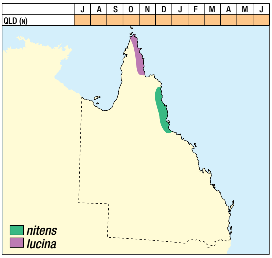
Wingspan: ♂ 25 mm, ♀ 27 mm. **Similar species:** Purple Moonbeam, White-margined Moonbeam. Azure Moonbeam males have the upperside colour paler blue, and the HW upperside black terminal line narrower than in Purple Moonbeam males. **Behaviour:** males fly high (about 12 m) around the tops of trees, in sunlight, and amongst grass during overcast weather. Number of generations completed annually not recorded; adults are possibly very seasonal. **Habitat:** adults have been collected in or near lowland tropical rainforest. **Status:** rare and restricted, known only from two males from Iron Range on Cape York Peninsula, QLD. **Larval food plant:** not recorded. **Larval attendant ant:** not recorded.

White-margined Moonbeam *Philiris ziska*



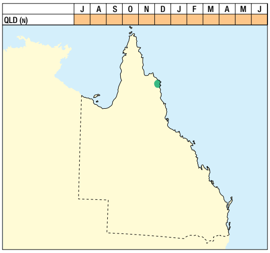
Wingspan: ♂ 21 mm, ♀ 21 mm. **Similar species:** Azure Moonbeam, Blue Moonbeam. White-margined Moonbeam males have the upperside colour dark purplish-blue, with a white costal streak on the HW. Females have more extensive areas of blue on the FW upperside compared to Blue Moonbeam females. **Behaviour:** males fly mainly in the late afternoon, and perch at the tops of tall trees heavily laden with vines or figs along forest margins where they establish territories in sunlit patches. Females fly in the same areas from early morning to early afternoon. **Habitat:** adults have been collected along the edges of lowland tropical rainforest. **Status:** uncommon, local and restricted to Cape York Peninsula. **Larval food plant:** not recorded. Possibly *Trophis scandens, Ficus*. **Larval attendant ant:** not recorded.

Blue Moonbeam *Philiris nitens*

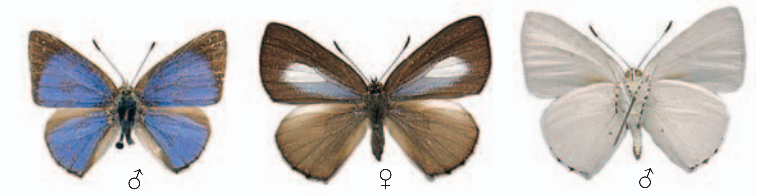


Wingspan: ♂ 22 mm, ♀ 24 mm. **Similar species:** Sapphire Moonbeam, White-margined Moonbeam. Blue Moonbeam females usually have white patches on the upperside of both wings compared to Sapphire Moonbeam females. **Variation:** two subspecies; *P. n. nitens* females vary in size of white patches and extent of blue suffusion on FW upperside. **Behaviour:** adults fly rapidly and appear as a silver flash as they fly between trees. Probably several generations completed annually. **Habitat:** tropical rainforest, especially disturbed or regrowth areas and the edges of the forest where the larval food plants frequently grow. **Status:** common but local. **Larval food plants:** usually *Macaranga involucrata*; also *M. tanarius*, *Glochidion philippicum* in the Wet Tropics, QLD. **Larval attendant ant:** none.

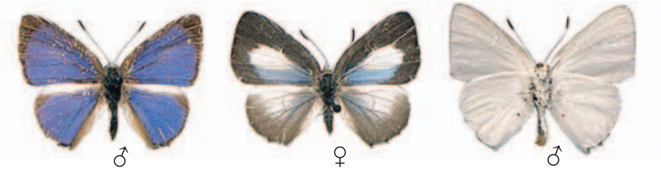
Sapphire Moonbeam *Philiris sappheira*



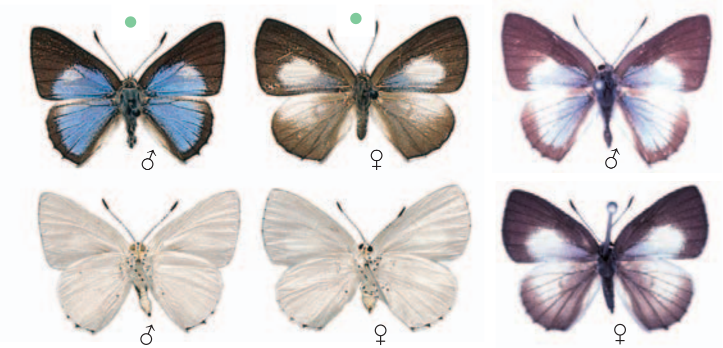
Wingspan: ♂ 22 mm, ♀ 22 mm. **Similar species:** Blue Moonbeam. The Sapphire Moonbeam has the FW termen slightly more rounded; males have the upperside colour bluish-green, rather than blue; females lack white patches on the upperside of both wings. **Behaviour:** not recorded. Several generations completed annually. **Habitat:** lowland tropical rainforest, preferring disturbed areas or edges of the forest where the larval food plant grows. **Status:** rarely seen, very local and restricted to a small area north of Cooktown, from near Mount Webb to Isabella Falls, QLD. **Larval food plant:** *Macaranga involucrata*. **Larval attendant ant:** none.



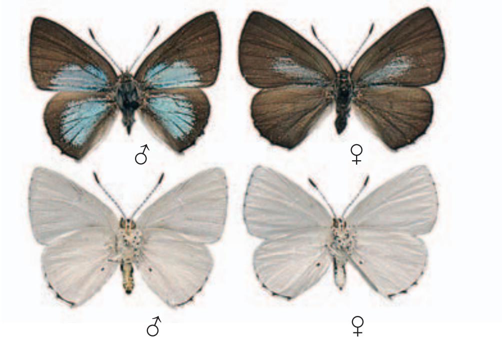
Azure Moonbeam



White-margined Moonbeam

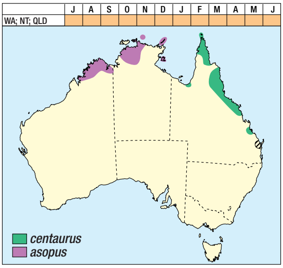


Blue Moonbeam



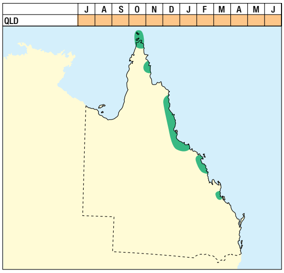
Sapphire Moonbeam

Purple Oak-blue *Arhopala centaurus*



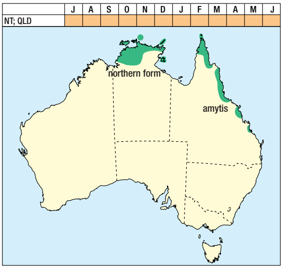
Other name: Dull Oak-blue. **Wingspan:** ♂ 42 mm, ♀ 42 mm. **Similar species:** Bright Oak-blue, Shining Oak-blue. The Purple Oak-blue has the upperside somewhat richer and duller purple, and the underside ground colour and markings paler, with the HW underside median band between veins M_1 and M_3 joined to the postmedian band. **Variation:** two subspecies. **Behaviour:** adults are conspicuous in flight, revealing flashes of brilliant purple, but when settled on a shady leaf, with wings closed, are difficult to see; they often perch in loose clusters on the same tree where they remain settled for long periods, punctuated by sudden short bursts of activity. Probably several generations completed annually. Adults occasionally migrate. **Habitat:** eucalypt open-forest, paperbark woodland, flood plains of creeks, edges of mangrove, and the edges of rainforest on sand dunes or behind beaches in and near coastal areas, wherever nests of the Green Tree Ant are established. **Status:** common but local. **Larval food plants:** *Buchanania, Maranthes, Terminalia, Dendrophthoe, Corymbia, Melaleuca, Cupaniopsis, *Lagerstroemia*. **Larval attendant ant:** *Oecophylla smaragdina*.

Bright Oak-blue *Arhopala madytus*

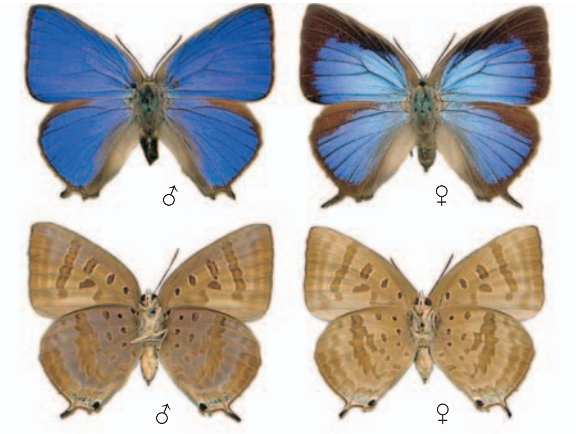


Wingspan: ♂ 42 mm, ♀ 42 mm. **Similar species:** Purple Oak-blue, Shining Oak-blue. The Bright Oak-blue has the upperside colour darker purplish-blue. It has the underside ground colour and markings darker, with the FW underside postmedian band more irregular in width and narrower near the costa than in the Purple Oak-blue. **Behaviour:** adults perch in loose clusters for long periods on particular trees. Probably several generations completed annually. **Habitat:** edges of lowland rainforest and gallery forest in and near coastal areas, where the larval food plants grow and nests of the Green Tree Ant are established. **Status:** common but local; less common in cc. QLD. **Larval food plants:** *Terminalia catappa, T. melanocarpa, T. sericocarpa, Hibiscus tiliaceus*. **Larval attendant ant:** *Oecophylla smaragdina*.

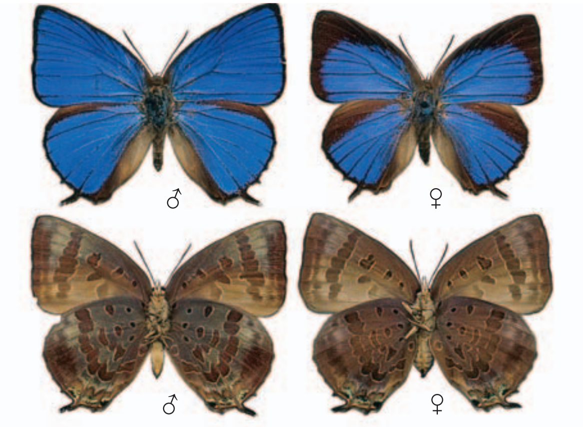
Shining Oak-blue *Arhopala micale*



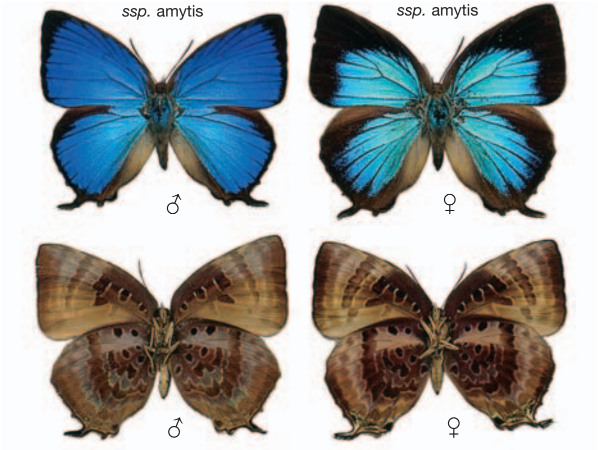
Other name: Common Oak-blue. **Wingspan:** ♂ 44 mm, ♀ 43 mm. **Similar species:** Purple Oak-blue, Bright Oak-blue. The Shining Oak-blue has the upperside brighter blue, and the underside ground colour usually richer dark purplish-brown. **Variation:** one subspecies and one geographical form; both with variable underside pattern. **Behaviour:** adults frequently perch in loose clusters for long periods amongst the dense foliage of particular trees; in flight they expose the brilliant blue upperside, but when settled they do not open their wings and are very inconspicuous. Probably several generations completed annually. **Habitat:** edges of lowland rainforest, gallery forest and monsoon forest (deciduous vine thicket), and margins of mangrove, in and near coastal areas wherever nests of the Green Tree Ant are established. **Status:** common but local. **Larval food plants:** *Buchanania, Cordia, Parinari, Calophyllum, Terminalia, Glochidion, Cryptocarya, Hibiscus, Xylocarpus, Acmena, Ristantia, Syzygium, Cupaniopsis, Heritiera, Faradaya, *Lagerstroemia*. **Larval attendant ant:** *Oecophylla smaragdina*.



Purple Oak-blue

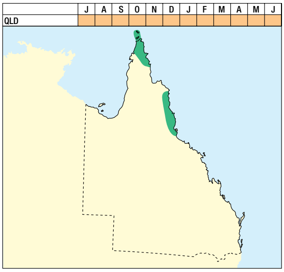


Bright Oak-blue



Shining Oak-blue

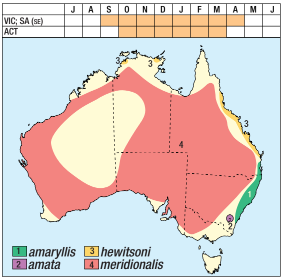
White Oak-blue *Arhopala wildei*



	J	A	S	O	N	D	J	F	M	A	M	J
QLD	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧

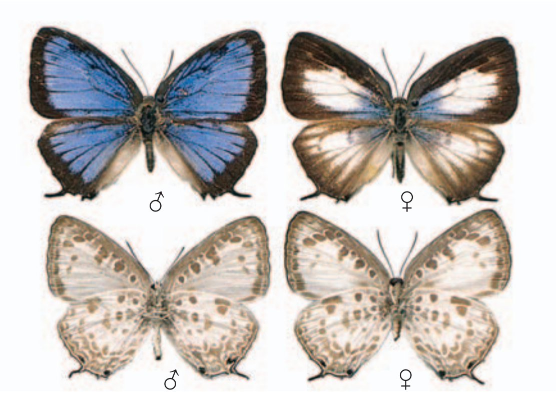
Other name: Small Oak-blue. **Wingspan:** ♂ 33 mm, ♀ 33 mm. **Similar species:** none. The White Oak-blue has the underside ground colour white. **Behaviour:** males are most active during the early morning, flying close to the ground across clearings; they may also fly near the foliage of trees occupied by nests of the associated ant. Females fly from about mid morning to mid afternoon but are most active around midday, often in the vicinity of the ant nests. During the late afternoon adults of both sexes become less active and settle on the foliage in protected areas to rest, usually on the upper surface of leaves. Probably several generations completed annually. **Habitat:** edges of wet lowland rainforest and lowland gallery forest, where nests of the associated ant are established, especially on large overlapping leaves of trees of *Ristantia pachysperma* and *Syzygium tierneyanum*, usually 3–5 m above the ground in the protected lower canopy where sunlight regularly penetrates the understorey. **Status:** common but very local. **Larval food/attendant ant:** *Polyrhachis queenslandica*.

Satin Azure *Ogyris amaryllis*

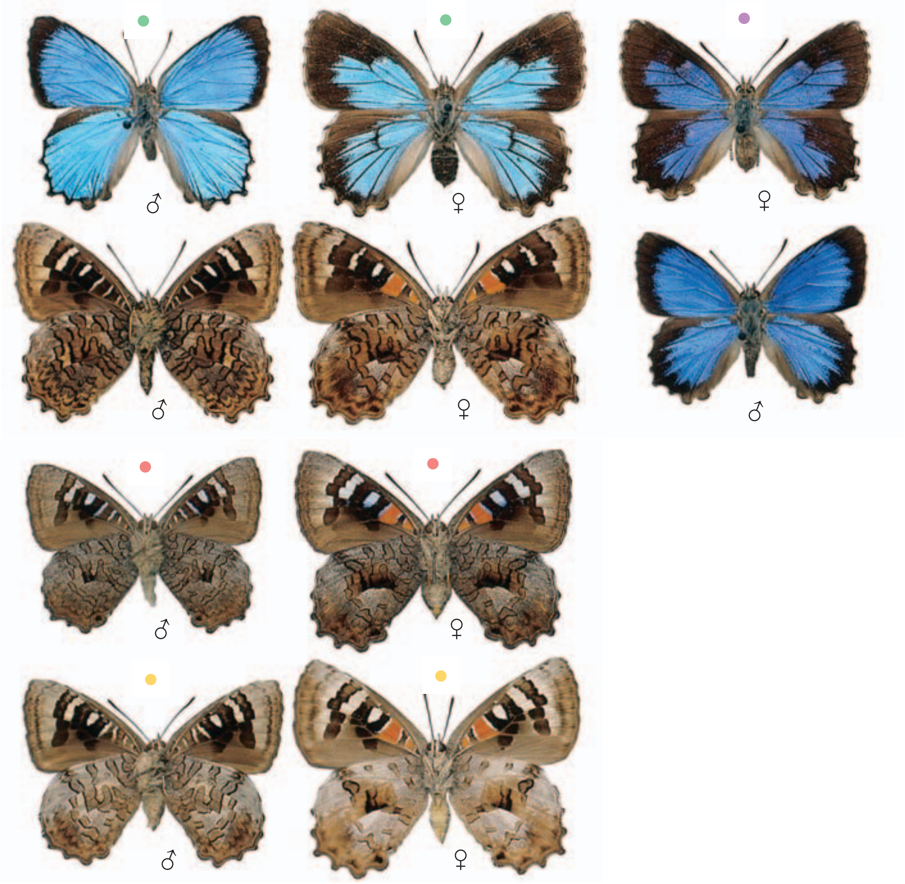


	J	A	S	O	N	D	J	F	M	A	M	J
VIC; SA (SE)			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		
ACT				🟧	🟧	🟧	🟧	🟧	🟧			

Other name: Amaryllis Azure. **Wingspan:** ♂ 34 mm, ♀ 34 mm. **Similar species:** Silky Azure. The Satin Azure has the FW underside postmedian band distinctly displaced at vein M_3; females have a scarlet or orange-red patch in the FW underside cell. **Variation:** four subspecies. **Behaviour:** adults fly rapidly during sunshine, from about late morning to late afternoon, but are most active during mid afternoon; they circle high around the host tree and clumps of the larval food plant, exposing the brilliant blue upperside only during flight; they frequently alight to settle for long periods on a dead or live branch of the host tree, or to feed from flowers of the food plant; when settled they slowly move the HWs alternately up and down and the wings always remain closed, making the adult difficult to detect; during cooler weather they may bask laterally, orienting the underside of the wings of one side of the body directly towards the afternoon sun. Two generations annually in ACT, with adults most abundant in Nov and again in Feb. **Habitat:** wide variety of habitats, including coastal mangrove, sheoak riparian open-forest, bulloak woodland, savannah woodland and acacia shrubland, wherever the mistletoe food plants grow as parasitic shrubs, often low down on trees of *Acacia* and *Casuarina/Allocasuarina* and other native genera. **Status:** common but local. **Larval food plants:** *Amyema bifurcata, A. cambagei, A. congener, A. fitzgeraldii, A. linophylla, A. lucasii, A. mackayense, A. maidenii, A. melaleucae, A. miraculosa, A. pendula, A. miquelii, A. preissii, A. quandang, A. sanguinea, A. thalassium*. **Larval attendant ants:** very occasionally *Anonychomyrma, Iridomyrmex, Ochetellus, Tapinoma, Paratrechina, Polyrhachis, Crematogaster, *Technomyrmex*.



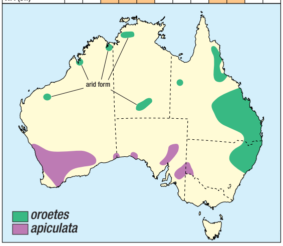
White Oak-blue



Satin Azure

Silky Azure *Ogyris oroetes*

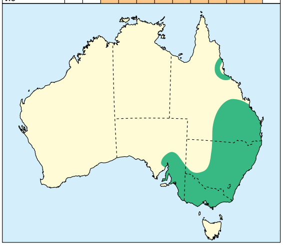
	J	A	S	O	N	D	J	F	M	A	M	J
QLD	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
WA (SW)			🟧	🟧	🟧				🟧	🟧		



Wingspan: ♂ 36 mm, ♀ 38 mm. **Similar species:** Satin Azure. The Silky Azure has the FW underside postmedian band relatively straight, and the antenna with a conspicuous club. **Variation:** two subspecies and one geographical form. **Behaviour:** adults fly during the afternoon, usually near the tops of the host tree supporting clumps of the larval food plant; they frequently settle, with wings closed, on small dead branches for long periods. Probably two or more generations completed annually in most areas of the range. **Habitat:** eucalypt woodland, mallee-woodland and savannah woodland, where the mistletoe food plants grow as parasitic shrubs on *Eucalyptus*, especially smooth-barked species. **Status:** common but local. **Larval food plants:** *Amyema miquelii, A. bifurcata, A. pendula*. **Larval attendant ants:** occasionally *Anonychomyrma, Froggattella, Iridomyrmex, Ochetellus, Camponotus, Crematogaster, Meranoplus, Podomyrma, Rhytidoponera, Tetraponera, *Technomyrmex*.

Broad-margined Azure *Ogyris olane*

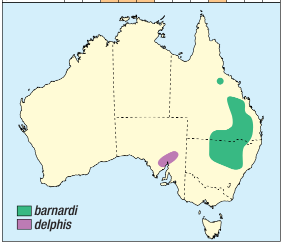
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	
VIC			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	



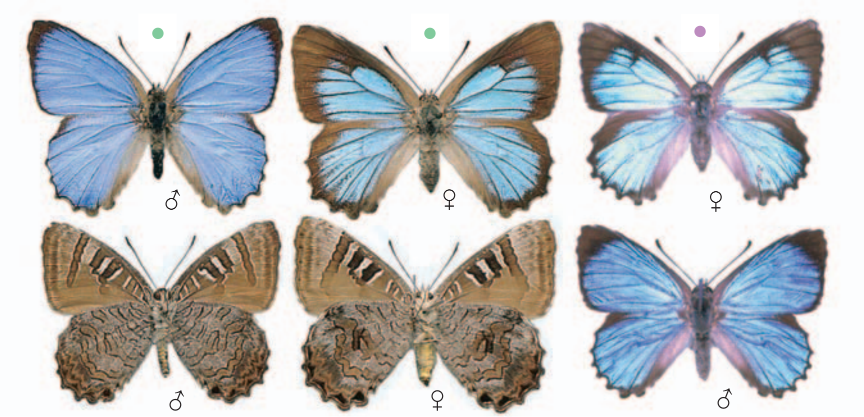
Other names: Olane Azure, Dull Purple Azure. **Wingspan:** ♂ 34 mm, ♀ 36 mm. **Similar species:** Bright Purple Azure. **Variation:** extent and colour of basal areas on upperside vary greatly in females. **Behaviour:** adults fly rapidly high around the host tree and clumps of the larval food plant, up to 20 m above the ground, during the afternoon; they frequently settle on dead branches of the host tree for long periods, with wings closed slowly moving the HWs alternately up and down; they readily feed from flowers of *Amyema miquelii* in late summer and autumn. Males regularly hilltop from late morning to late afternoon, flying amongst the canopy of the tallest trees, frequently alighting on dead branches. At least two generations annually in VIC and SA. **Habitat:** drier eucalypt open-forests and woodlands, especially on the tablelands and foothills and inland plains of the Great Dividing Range, from sea level to about 1060 m in QLD and NSW, wherever the mistletoe food plants grow as parasitic shrubs on *Eucalyptus*. **Status:** common but local. **Larval food plants:** *Amyema miquelii, A. pendula*. **Larval attendant ants:** occasionally *Anonychomyrma, Froggattella Iridomyrmex, Ochetellus, Camponotus, Crematogaster, Monomorium, Podomyrma*.

Bright Purple Azure *Ogyris barnardi*

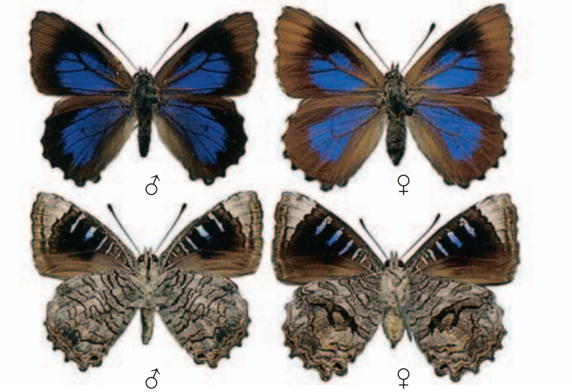
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (C)	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
SA			🟧	🟧	🟧				🟧			



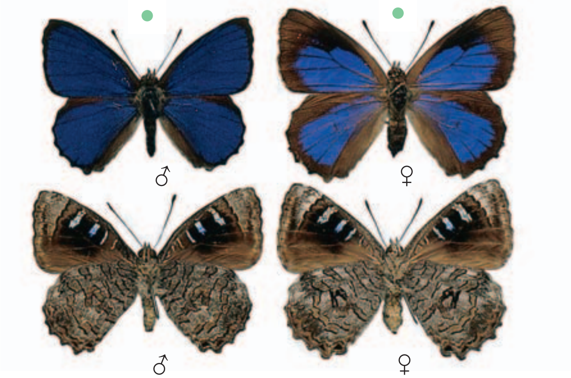
Other name: Barnard's Azure. **Wingspan:** ♂ 32 mm, ♀ 34 mm. **Similar species:** Broad-margined Azure. The Bright Purple Azure has the upperside brown margins narrower. **Variation:** two subspecies. **Behaviour:** adults fly rapidly around the host tree supporting clumps of the larval food plant, mainly in the afternoon; they frequently settle, with wings closed, on dead branches of the host tree for long periods, or feed from flowers of the food plant. At least two generations completed annually. **Habitat:** acacia woodland, including myall and brigalow, in semi-arid and arid areas, wherever the mistletoe food plant grows as a parasitic shrub. **Status:** common but local; many populations threatened in c. QLD and n. NSW through extensive land clearing of brigalow woodland. **Larval food plant:** *Amyema quandang*. **Larval attendant ant:** occasionally *Crematogaster*.



Silky Azure



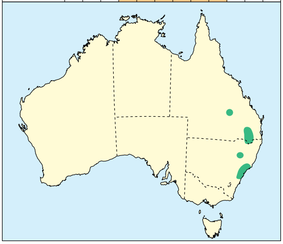
Broad-margined Azure



Bright Purple Azure

Golden Azure *Ogyris ianthis*

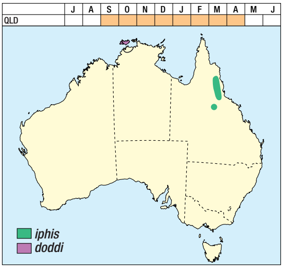
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)				🟧	🟧		🟧	🟧	🟧			
NSW				🟧	🟧	🟧	🟧	🟧	🟧			



Other name: Sydney Azure. **Wingspan:** ♂ 33 mm, ♀ 33 mm. **Similar species:** Orange-tipped Azure, Sapphire Azure. Golden Azure males have the FW upperside black margins broader than in Orange-tipped Azure males. **Variation:** extent of golden-orange central patches on HW upperside varies in females. **Behaviour:** adults fly very rapidly, mainly during the afternoon. Males fly on certain hilltops where they patrol the canopy of trees in sunlit areas for short periods before quickly departing down the slopes. Probably two generations completed annually, with adults more abundant from late Oct to mid Nov and again from late Jan to Mar. **Habitat:** dry eucalypt woodland and open-forest on sandstone outcrops or sandy soils, where the mistletoe food plants grow as parasitic shrubs on *Eucalyptus, Angophora, Acacia* and *Allocasuarina*. **Status:** uncommon and very local; rare in Sydney. **Larval food plants:** *Amyema linophylla, A. miquelii, A. quandang, Dendrophthoe glabrescens, D. vitellina, Muellerina eucalyptoides*. **Larval attendant ant:** *Froggattella kirbii*.

Orange-tipped Azure *Ogyris iphis*

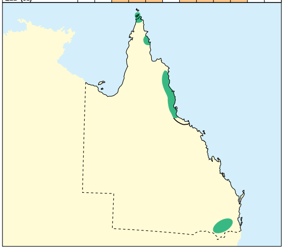
	J	A	S	O	N	D	J	F	M	A	M	J
QLD			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		



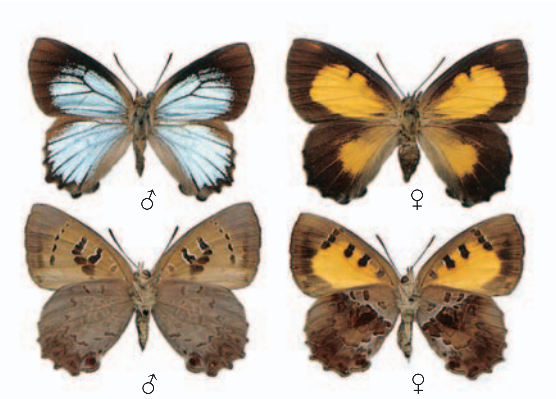
Other name: Dodd's Azure. **Wingspan:** ♂ 31 mm, ♀ 32 mm. **Similar species:** Golden Azure, Sapphire Azure. **Variation:** two subspecies. **Behaviour:** adults fly rapidly, usually among the tops of the host tree supporting clumps of the larval food plants. Males regularly visit hilltops where they patrol the canopy of trees; they may feed from the flowers of *Bursaria* and *Amyema*. Probably two generations completed annually. **Habitat:** dry eucalypt woodland and open-forest on sandstone or sandy soils, where the mistletoe food plants grow as parasitic shrubs on *Eucalyptus*, *Angophora* and *Acacia*. **Status:** uncommon and very local; rare in n. NT. **Larval food plants:** *Amyema bifurcata, A. miquelii, A. quandang, Dendrophthoe glabrescens, D. vitellina*. **Larval attendant ant:** *Froggattella kirbii*.

Sapphire Azure *Ogyris aenone*

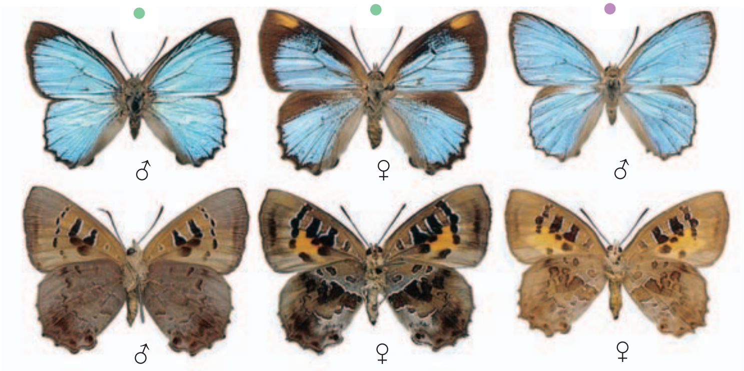
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (N)				🟧	🟧		🟧	🟧	🟧	🟧		
QLD (SE)			🟧	🟧	🟧		🟧	🟧	🟧	🟧		



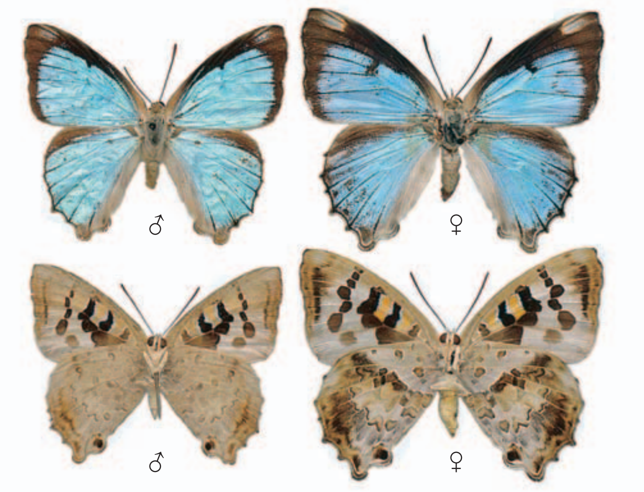
Other names: Cooktown Azure, Orange-spot Azure. **Wingspan:** ♂ 40 mm, ♀ 45 mm. **Similar species:** Golden Azure, Orange-tipped Azure. Sapphire Azure males have the HW tornus more produced with a prominent lobe, the FW termen straighter with the apex more pointed, and usually a pale blue subapical patch near the FW upperside costa. **Behaviour:** adults fly rapidly, usually during the mid to late afternoon, high amongst the canopy of the host trees supporting clumps of the larval food plants; in flight the upperside appears as flashes of brilliant iridescent blue; when settled the wings remain closed and adults are difficult to detect; they may feed from flowers of *Melaleuca*, *Grevillea* and *Amyema*, and the sap of *Angophora*. Probably two generations annually, with adults emerging in spring and again in late summer-autumn. **Habitat:** coastal paperbark woodland in n. QLD, where the mistletoe food plants grow as parasitic shrubs on *Melaleuca viridiflora* on relatively flat poorly drained soils; dry mixed savannah woodland on the western fringe of the Darling Downs in se. QLD, where the food plant grows on *Allocasuarina luehmannii* on sandy soil. **Status:** uncommon and very local. **Larval food plants:** *Dendrophthoe vitellina, Diplatia furcata, Diplatia tomentosa* in ne. QLD; *Amyema linophylla* in s. QLD; rarely *A. miquelii, Lysiana exocarpi*. **Larval attendant ants:** *Philidris cordatus* in n. QLD; *Anonychomyrma* sp. (*itinerans* group) in s. QLD.



Golden Azure



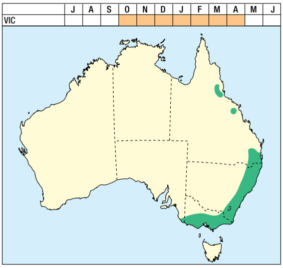
Orange-tipped Azure



Sapphire Azure

Dark Purple Azure *Ogyris abrota*

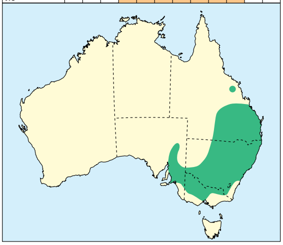
	J	A	S	O	N	D	J	F	M	A	M	J
VIC				🟧	🟧	🟧	🟧	🟧	🟧	🟧		



Wingspan: ♂ 39 mm, ♀ 42 mm. **Similar species:** Southern Purple Azure. Dark Purple Azure males are smaller, have the HW termen more rounded, and the bars in the FW underside cell less developed. **Behaviour:** adults fly rapidly during warm, sunny conditions, mainly from late morning to mid afternoon. Males patrol treetops, 12–15 m or more above the ground, preferring trees in open places close to the breeding areas, occasionally perching high up on a leaf or branch for short periods to establish territories. Females usually observed flying near or settled on a branch of the larval food plant. Two generations annually in c. VIC. **Habitat:** eucalypt woodland, open-forest and tall open-forest on and near the Great Dividing Range, where the mistletoe food plants grow as parasitic shrubs on *Eucalyptus*, *Banksia* and *Allocasuarina*; also suburban areas in Melbourne. **Status:** generally common but local; less common in ne. QLD, coastal se. QLD and SA. **Larval food plants:** usually *Muellerina eucalyptoides*; also *Dendrophthoe vitellina* in se. QLD; *Amyema congener, M. celastroides* in cc. NSW. **Larval attendant ants:** occasionally *Anonychomyrma*, *Froggattella*, *Iridomyrmex*, *Technomyrmex*, *Crematogaster*, *Rhytidoponera*.

Southern Purple Azure *Ogyris genoveva*

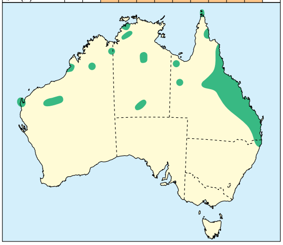
	J	A	S	O	N	D	J	F	M	A	M	J
QLD			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		
VIC				🟧	🟧	🟧	🟧	🟧	🟧	🟧		



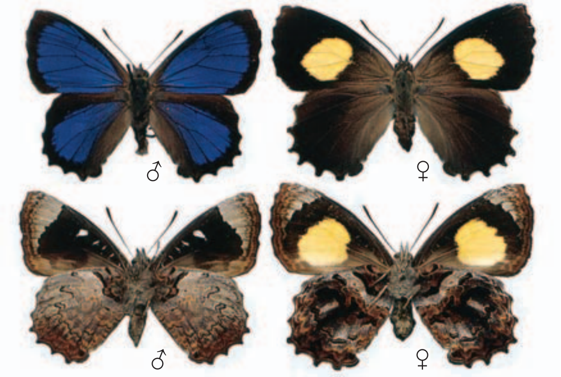
Other name: Genoveva Azure. **Wingspan:** ♂ 47 mm, ♀ 53 mm. **Similar species:** Northern Purple Azure, Dark Purple Azure. **Variation:** extent and colour of iridescent basal areas on upperside vary in females. **Behaviour:** adults fly very rapidly during late afternoon; they may feed from sap flows of *Eucalyptus* and *Acacia*. Males fly around tops of the host tree supporting clumps of the larval food plants where they frequently settle high up on dead branches, or on hilltops where they patrol the canopy and perch on dead branches for short periods; when settled the wings always remain closed, moving the HWs alternately up and down. Females often seen at rest or walking on trunk and branches of the host tree. Two generations annually in s. QLD, NSW and nw. VIC. **Habitat:** eucalypt woodland and mallee shrubland, mainly in low rainfall areas where the mistletoe food plants grow as parasitic shrubs on *Eucalyptus* and *Acacia*. **Status:** common but very local. **Larval food plants:** *Amyema, Dendrophthoe, Muellerina eucalyptoides*. **Larval attendant ant:** *Camponotus*.

Northern Purple Azure *Ogyris zosine*

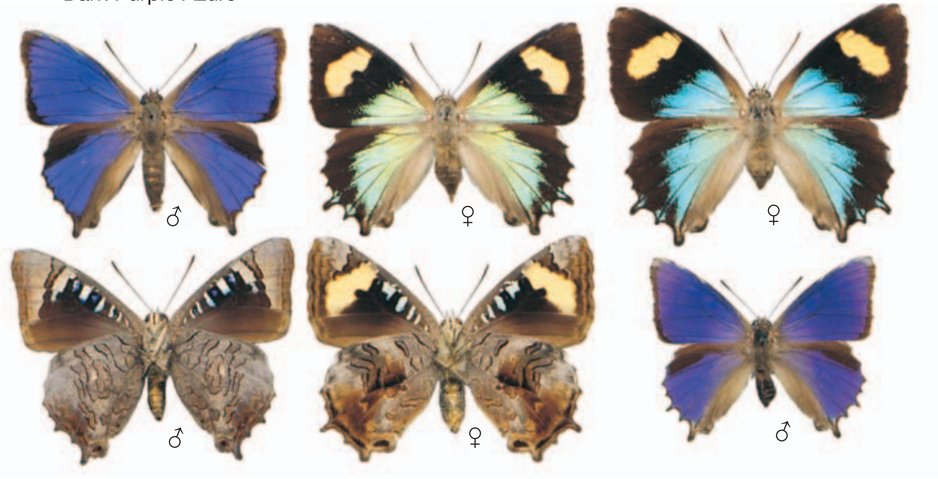
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (N)	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
QLD (SE)			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	



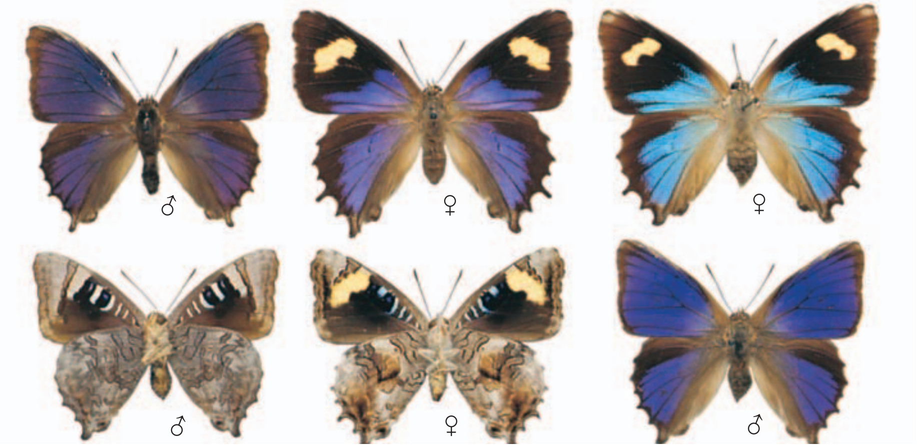
Wingspan: ♂ 43 mm, ♀ 47 mm. **Similar species:** Southern Purple Azure. Northern Purple Azure males have the upperside colour duller and darker purple compared to Southern Purple Azure males. **Variation:** extent and colour of iridescent basal areas on upperside vary in females. **Behaviour:** adults fly rapidly in the afternoon; they occasionally feed from flowers of the larval food plant or drink from pools of water. Males strongly hilltop and patrol branches of the tallest trees. Females usually observed flying near or walking on the food plant, or walking on branches and trunk of the host tree. At least two generations completed annually, with adults more abundant towards the end of the wet season. **Habitat:** usually savannah woodland and open-woodland, where the mistletoe food plants grow as parasitic shrubs on *Eucalyptus* and *Acacia*; also eucalypt open-forest and heath-woodland in coastal areas; acacia shrubland in arid areas. **Status:** common but very local. **Larval food plants:** *Amyema, Dendrophthoe, Muellerina celastroides, Decaisnina signata*. **Larval attendant ant:** *Camponotus*.



Dark Purple Azure



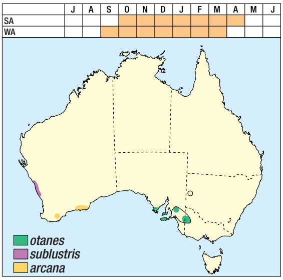
Southern Purple Azure



Northern Purple Azure

Small Bronze Azure *Ogyris otanes*

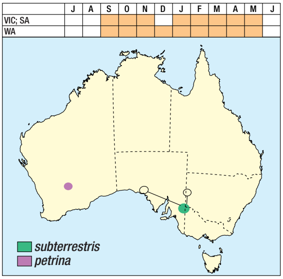
Other names: Small Brown Azure, Western Dark Azure. **Wingspan:** ♂ 35 mm, ♀ 40 mm. **Similar species:** Large Bronze Azure, Arid Bronze Azure. **Variation:** three subspecies. **Behaviour:** adults fly very rapidly, about 1 m above the ground, from about mid morning to mid afternoon; they often settle on the ground or on sticks, dead wood and stones with wings closed. Males fly close to the breeding areas or hilltop on sand ridges to establish territories. Probably two generations annually in nw. VIC and SA, with adults emerging in Oct–Nov and again in Mar. **Habitat:** heathland and mallee-heath in the semi-arid zone of nw. VIC and SA, where the larval food plant grows as a small shrub in the fringes of low-lying areas in sandy soil; eucalypt woodland or coastal heathland and mallee shrubland in sw. WA; open-heath on limestone flats behind coastal sand dunes in w. WA. **Status:** common but very local; endangered in VIC, lower risk in SA. **Larval food plants:** *Choretrum spicatum* in nw. VIC; *C. glomeratum* in SA and sw. WA; *Leptomeria preissiana* in w. WA. **Larval attendant ant:** *Camponotus.*



	J	A	S	O	N	D	J	F	M	A	M	J
SA				🟧	🟧	🟧	🟧	🟧	🟧	🟧		
WA			🟧	🟧	🟧	🟧	🟧	🟧	🟧			

Arid Bronze Azure *Ogyris subterrestris*

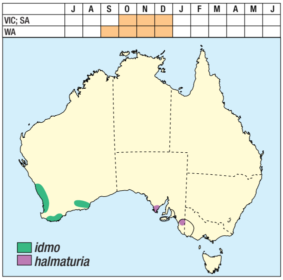
Other names: Mallee Bronze Azure, Mildura Ogyris. **Wingspan:** ♂ 36 mm, ♀ 36 mm. **Similar species:** Large Bronze Azure, Small Bronze Azure. **Variation:** two subspecies. **Behaviour:** males fly rapidly close to the ground, within about 2 m, from mid morning to midday; they form leks in open places adjacent to or some distance from the breeding areas, or hilltop on small sand ridges; they frequently settle in patches on the ground, twigs and low shrubs to establish territories; when settled the wings always remain closed. Females usually observed at rest or walking for long periods near entrances of the ants' nests during early to mid afternoon. Probably two generations annually in SA. **Habitat:** mallee woodland and shrubland, and hop-bush open-shrubland on sandy soil, often near flood plains, in the semi-arid zone, where colonies of the associated ant are established at the base of trees and shrubs. **Status:** common but very local and restricted; vulnerable. **Larval food/attendant ants:** *Camponotus terebrans* in VIC and SA; *Camponotus* sp. (*wiedekehri* group) in WA.



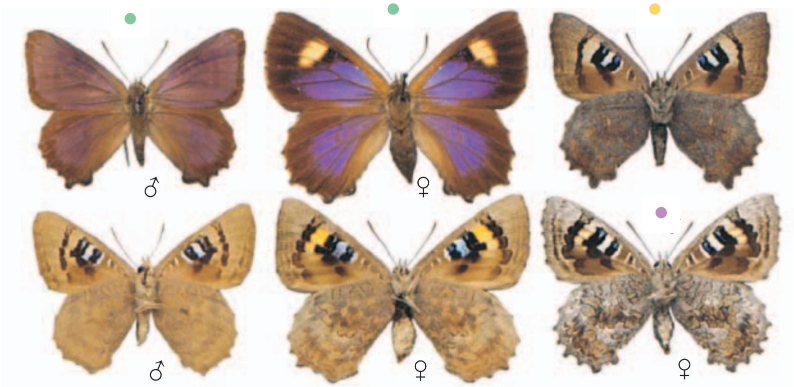
	J	A	S	O	N	D	J	F	M	A	M	J
VIC; SA			🟧	🟧	🟧		🟧	🟧	🟧	🟧	🟧	
WA			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	

Large Bronze Azure *Ogyris idmo*

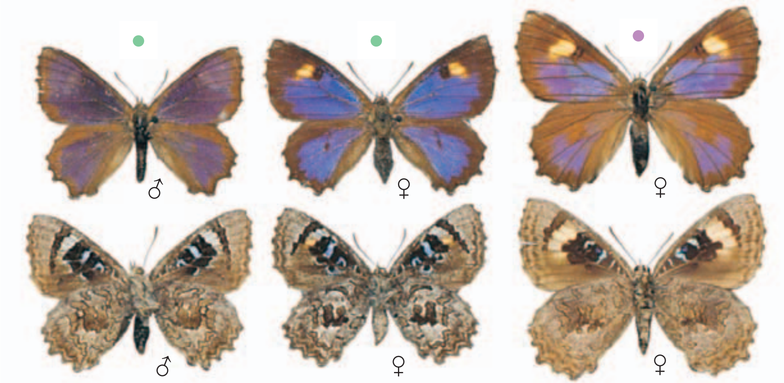
Other name: Large Brown Azure. **Wingspan:** ♂ 46 mm, ♀ 46 mm. **Similar species:** Small Bronze Azure, Arid Bronze Azure. **Variation:** two subspecies. **Behaviour:** adults fly very rapidly within 1–2 m of the ground in the more open areas over low heath; they often settle, with wings closed, on the bare ground or on stones, sticks and dead twigs. Males are most active during the late morning in SA, or in the afternoon in WA. Females are more active in the morning in WA; they frequently settle on the ground, often near the ants' nests, with wings closed, moving the HWs alternately up and down. One generation annually in w. VIC and SA, with adults emerging in late Oct and early Nov. **Habitat:** open-heath and mallee-heath on sandy soil or limestone, where colonies of the associated ants are established; also mallee open-woodland in WA, and jarrah woodland near Perth. **Status:** generally uncommon and very local, but may be abundant in some years after fire; subspecies *O. i. halmaturia* endangered. **Larval food/attendant ants:** *Camponotus nigriceps, C. terebrans.*



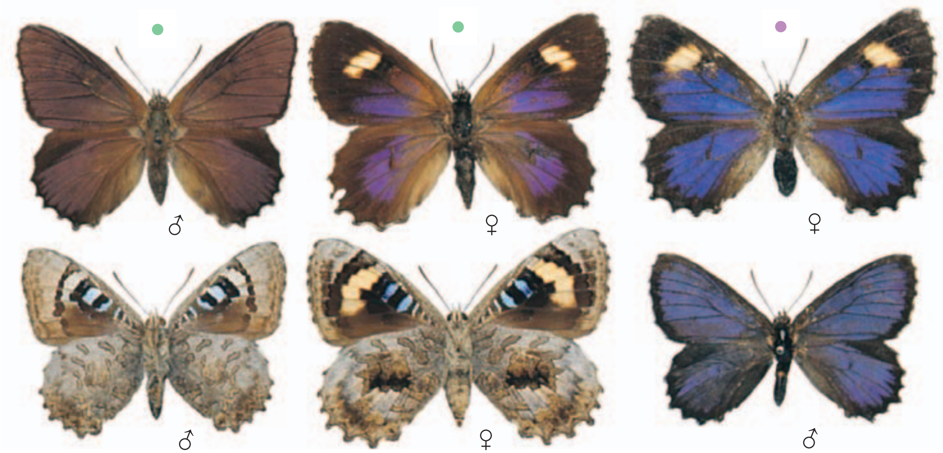
	J	A	S	O	N	D	J	F	M	A	M	J
VIC; SA				🟧	🟧	🟧						
WA			🟧	🟧	🟧	🟧						



Small Bronze Azure



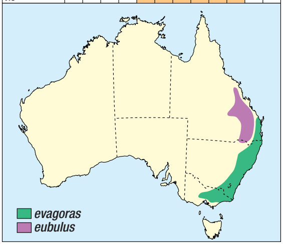
Arid Bronze Azure



Large Bronze Azure

Imperial Hairstreak *Jalmenus evagoras*

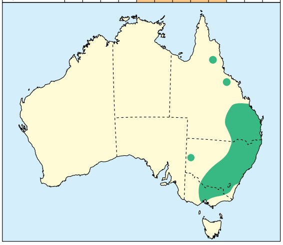
	J	A	S	O	N	D	J	F	M	A	M	J
QLD				🟧	🟧	🟧	🟧	🟧	🟧	🟧		
VIC					🟧	🟧	🟧	🟧	🟧	🟧		



Other names: Common Imperial Blue, Pale Imperial Blue. **Wingspan:** ♂ 32 mm, ♀ 37 mm. **Similar species:** Stencilled Hairstreak, Northern Hairstreak. The Imperial Hairstreak has the upperside colour darker, with paler and more distinct greenish-blue central areas. **Variation:** two subspecies. **Behaviour:** adults usually fly within a few metres of the ground around the larval food plant or close to the breeding areas; they readily feed from flowers such as *Bursaria*. Males cluster around pupae just before the females emerge. Up to three overlapping generations annually near Sydney. **Habitat:** old growth brigalow woodland in northern inland areas; eucalypt woodland and open-forest in coastal and southern areas of the range, preferring the more open, disturbed areas where the larval food plants grow as small, regenerating shrubs. **Status:** generally very common but local; subspecies *J. e. eubulus* lower risk. **Larval food plants:** various *Acacia*, especially *A. harpophylla* in inland c. and s. QLD; *A. irrorata*, *A. melanoxylon* near Brisbane; *A. mearnsii* near Sydney, Canberra, Melbourne; rarely *Amyema pendula*. **Larval attendant ants:** *Iridomyrmex* sp. (*anceps* group), *Iridomyrmex* sp. (*rufoniger* group).

Stencilled Hairstreak *Jalmenus ictinus*

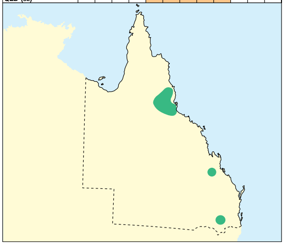
	J	A	S	O	N	D	J	F	M	A	M	J
QLD					🟧	🟧	🟧	🟧	🟧			
VIC					🟧	🟧	🟧	🟧	🟧			



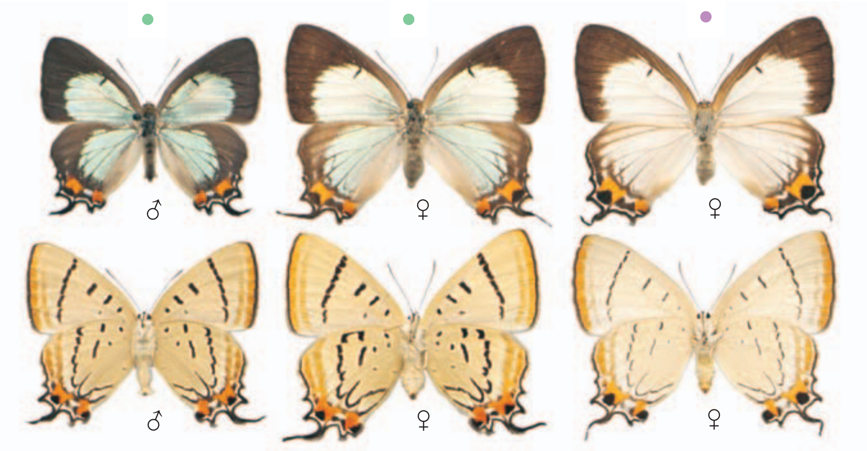
Other name: Ictinus Blue. **Wingspan:** ♂ 30 mm, ♀ 34 mm. **Similar species:** Imperial Hairstreak, Macqueen's Hairstreak. The Stencilled Hairstreak has the underside ground colour darker, with the HW white postmedian band more pronounced compared to the Imperial Hairstreak. **Variation:** colour of iridescent central areas on upperside varies; size of underside black markings varies geographically. **Behaviour:** adults fly around, or close to, the larval food plant. Males frequently patrol the outer branches and crown; they also perch on the outer foliage of the tree, usually high up, to rest or bask. Females usually observed walking along the branches of the food plant. Probably two or three overlapping generations completed annually. **Habitat:** drier eucalypt and acacia woodlands, mainly on the inland slopes, foothills and plains of the Great Dividing Range where the larval food plants grow as mature trees. **Status:** common but very local. **Larval food plants:** *Acacia bidwillii, A. dealbata, A. decurrens, A. harpophylla, A. implexa, A. mearnsii, A. melanoxylon, A. pendula, A. rubida, Heterodendron diversifolium*. **Larval attendant ants:** *Iridomyrmex purpureus* in most areas of the range; *I. spadius* in ne. QLD.

Macqueen's Hairstreak *Jalmenus pseudictinus*

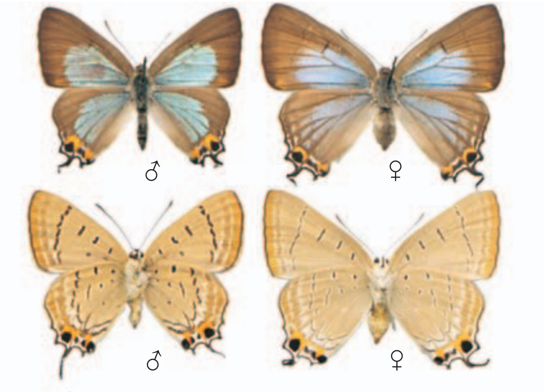
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (N)				🟧		🟧	🟧		🟧	🟧	🟧	
QLD (SE)					🟧	🟧	🟧	🟧	🟧			



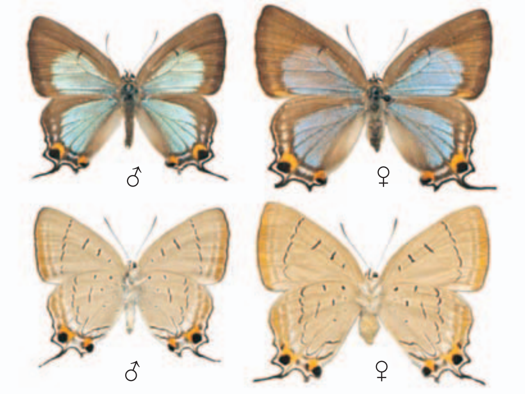
Other name: Pseudictinus Blue. **Wingspan:** ♂ 29 mm, ♀ 35 mm. **Similar species:** Stencilled Hairstreak. Macqueen's Hairstreak has the FW costa slightly more arched near the base. **Variation:** extent and colour of iridescent central areas on upperside vary in females. **Behaviour:** adults fly around the larval food plant or close to the breeding areas; they readily feed from flowers of *Bursaria* late in the season. Probably two or three overlapping generations completed annually. **Habitat:** eucalypt open-forest and woodland, mainly in drier subcoastal areas where the larval food plants often grow as small trees; rarely on the coast. **Status:** common but very local. **Larval food plants:** *Acacia flavescens, Acacia humifusa, Alectryon conatus* in n. QLD; *Acacia harpophylla* in s. QLD; very occasionally *Heterodendron diversifolium*. **Larval attendant ant:** *Froggattella kirbii*.



Imperial Hairstreak

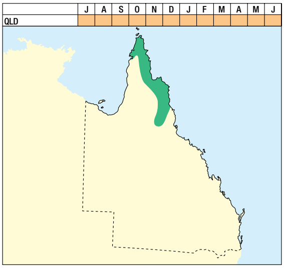


Stencilled Hairstreak



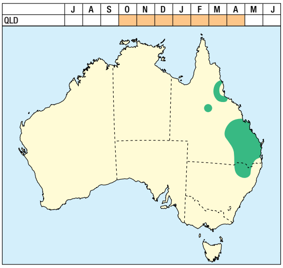
Macqueen’s Hairstreak

Northern Hairstreak *Jalmenus eichhorni*



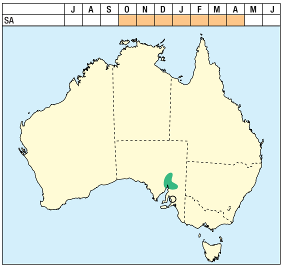
Other name: Northern Imperial Blue. **Wingspan:** ♂ 28 mm, ♀ 32 mm. **Similar species:** Imperial Hairstreak. The Northern Hairstreak has a black subterminal line on the underside of both wings. **Variation:** colour of iridescent blue central areas on upperside occasionally very pale bluish-white in females. **Behaviour:** adults reside close to the breeding areas where they fly around the larval food plant. Females usually seen crawling along the stems and branches, searching for suitable places to lay their eggs. Probably several generations completed annually; adults are seasonal and may be abundant during Feb and Mar in the drier areas west of the Atherton Tableland, QLD. **Habitat:** savannah woodland, preferring the more open areas where the soil has been disturbed and the larval food plants are regenerating. **Status:** common but very local. **Larval food plants:** *Acacia crassicarpa, A. holosericea, A. humifusa, A. leptocarpa*. **Larval attendant ants:** usually *Iridomyrmex reburrus*, *I. sanguineus*; occasionally *Iridomyrmex* sp. (*gracilis* group).

Emerald Hairstreak *Jalmenus daemeli*

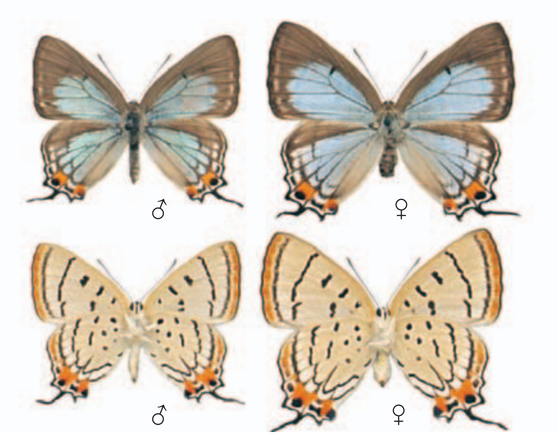


Other name: Damel's Blue. **Wingspan:** ♂ 30 mm, ♀ 34 mm. **Similar species:** Waterhouse's Hairstreak. The Emerald Hairstreak has the HW black tornal spots larger, the HW tail longer, and the FW broader with the apex more rounded. **Variation:** extent and colour of iridescent central areas on upperside very variable. **Behaviour:** adults fly in the understorey around the larval food plant or close to the breeding areas; they may feed from flowers of *Acacia*. At least two overlapping generations completed annually. **Habitat:** savannah woodland, particularly in the more inland areas of the range than on the coast where the larval food plants grow. **Status:** common but very local. **Larval food plants:** usually *Acacia*; also *Eucalyptus melanophloia, Corymbia, Heterodendron diversifolium* in s. QLD. **Larval attendant ant:** *Iridomyrmex* sp. (*rufoniger* group).

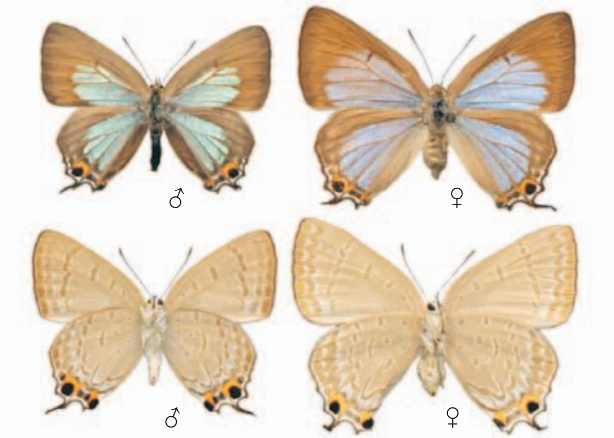
Waterhouse's Hairstreak *Jalmenus lithochroa*



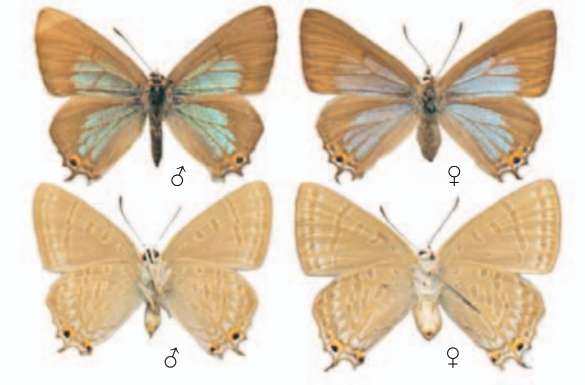
Other name: Lithochroa Blue. **Wingspan:** ♂ 29 mm, ♀ 32 mm. **Similar species:** Emerald Hairstreak, Amethyst Hairstreak. Waterhouse's Hairstreak has the HW tornal black spots smaller, the HW tail shorter, and the FW narrower with the apex more sharply pointed compared to the Emerald Hairstreak. It is larger, and has the HW projection or tail at the end of vein CuA_2 longer than in the Amethyst Hairstreak. **Behaviour:** adults fly around the larval food plants and usually stay close to the breeding areas. Number of generations completed annually not recorded; adults may be abundant in Jan and Feb. **Habitat:** open-shrubland and open-woodland with a grassy understorey, often in disturbed or slightly degraded areas such as pastoral land where the larval food plant grows, in semi-arid open plains. **Status:** common but very local; extinct near Adelaide. **Larval food plants:** *Acacia victoriae* in the Flinders Ranges and Port Augusta, SA; *A. pycnantha* near Adelaide. **Larval attendant ants:** *Iridomyrmex purpureus, I. viridiaeneus*.



Northern Hairstreak

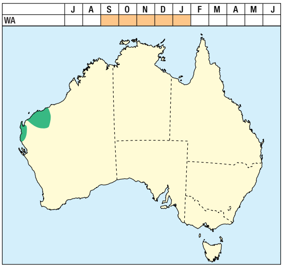


Emerald Hairstreak



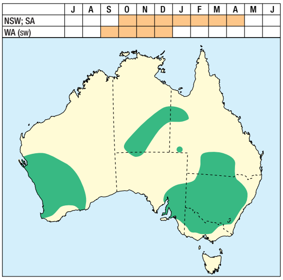
Waterhouse’s Hairstreak

Turquoise Hairstreak *Jalmenus clementi*



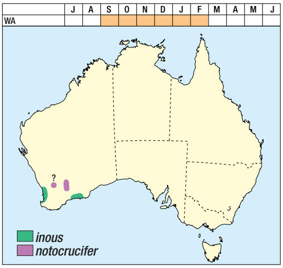
Wingspan: ♂ 24 mm, ♀ 27 mm. **Similar species:** Amethyst Hairstreak, Varied Hairstreak. The Turquoise Hairstreak has the HW terminal projections less developed with the termen between veins CuA_1 and 1A+2A straighter, and the upperside iridescent central areas somewhat brighter and paler. **Variation:** size very variable. **Behaviour:** adults fly around the foliage of the larval food plant and remain close to the breeding areas. Number of generations completed annually not recorded. **Habitat:** acacia open-shrubland in arid areas of nw. WA, where the larval food plants grow. Occurs further north than the Amethyst Hairstreak such that the two species are not found together. **Status:** common but very local. **Larval food plants:** *Acacia inaequilatera, A. alexandri, A. tetragonophylla*. **Larval attendant ant:** *Iridomyrmex*.

Amethyst Hairstreak *Jalmenus icilius*

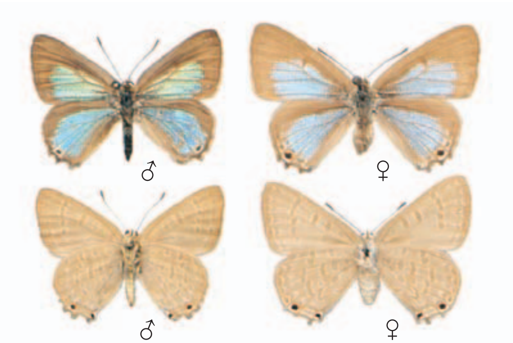


Other name: Icilius Blue. **Wingspan:** ♂ 26 mm, ♀ 29 mm. **Similar species:** Turquoise Hairstreak, Varied Hairstreak, Waterhouse's Hairstreak. The Amethyst Hairstreak has the HW terminal projections more developed with the termen between veins CuA_1 and 1A+2A irregular or dentate compared to the Turquoise Hairstreak. **Variation:** extent and colour of iridescent central areas on upperside, underside ground colour and clarity of markings, and size of HW tornal projection vary greatly; white postmedian band occasionally present on HW underside. **Behaviour:** adults fly rapidly close to the breeding areas; they feed from flowers of trees and shrubs when available. Males usually observed patrolling around the larval food plants. Probably two overlapping generations annually in se. Australia, with adults most abundant in Dec. **Habitat:** open-woodland, grassland and arid shrubland in the lower rainfall areas, where patches of the larval food plants grow. **Status:** generally very common but very local; lower risk in VIC. **Larval food plants:** usually *Acacia* in se. Australia; also *Senna artemisioides, S. nemophila* in arid areas; *Daviesia benthamii* in cs. WA. **Larval attendant ant:** *Iridomyrmex* sp. (*rufoniger* group).

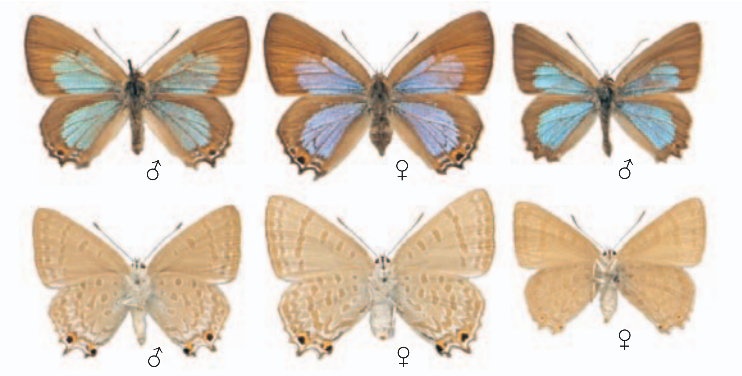
Varied Hairstreak *Jalmenus inous*



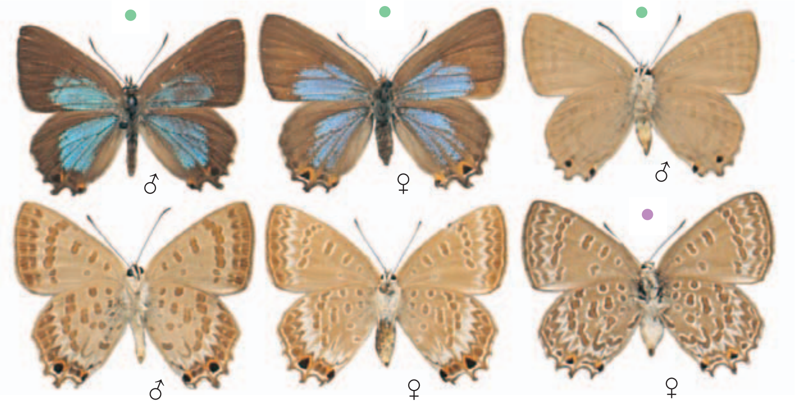
Other names: Inous Blue, Southern Cross Hairstreak. **Wingspan:** ♂ 29 mm, ♀ 30 mm. **Similar species:** Amethyst Hairstreak, Turquoise Hairstreak, Inland Hairstreak. The Varied Hairstreak is larger, has the FW broader, the HW black tornal spot at the end of vein CuA_2 often larger, and the HW underside markings broader and often more conspicuous, with the white postmedian band, when present, more pronounced compared to the Amethyst and Turquoise Hairstreaks. **Variation:** two subspecies, both with underside ground colour and markings variable. **Behaviour:** adults fly around the larval food plant and remain close to the breeding areas; they may feed from flowers, including *Nuytsia*. Males have been noted to cluster around pupae of females about to emerge. Probably two overlapping generations completed annually, with adults most abundant in Nov near Perth. **Habitat:** open-heath on sand dunes and mixed banksia woodland in coastal areas; open-woodland and sand-plain country in drier inland areas. **Status:** common but very local. **Larval food plants:** *Acacia rostellifera, A. saligna* in coastal areas; *Daviesia divaricata, Gastrolobium microcarpum* in subcoastal areas; *D. benthamii* in inland areas. **Larval attendant ants:** *Iridomyrmex conifer* in coastal areas; *Iridomyrmex* sp. (*rufoniger* group) in inland areas.



Turquoise Hairstreak



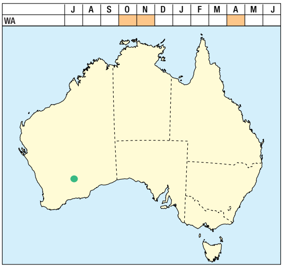
Amethyst Hairstreak



Varied Hairstreak

Inland Hairstreak *Jalmenus aridus*

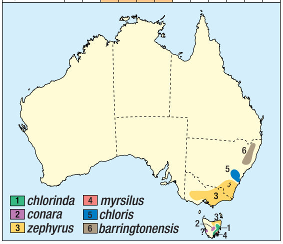
	J	A	S	O	N	D	J	F	M	A	M	J
WA				🟧	🟧					🟧		



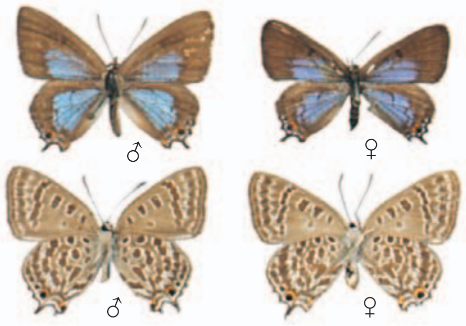
Wingspan: ♂ 25 mm, ♀ 24 mm. **Similar species:** Amethyst Hairstreak, Varied Hairstreak. The Inland Hairstreak is smaller, and has a prominent tail on the HW. **Behaviour:** adults remain close to the breeding areas, occasionally dispersing to feed from flowers. Probably two generations annually, although in some years adults are absent. **Habitat:** acacia shrubland in the eastern goldfields and wheat belt of WA, favouring young bushes of the *Senna* food plant, up to 1.5 m high, or old mature trees of the *Acacia* food plant, up to 4 m high, growing in shallow gullies with gentle slope. **Status:** uncommon, very local and restricted to Lake Douglas near Kalgoorlie, WA; vulnerable. **Larval food plants:** *Senna nemophila*, *Acacia tetragonophylla*. **Larval attendant ant:** *Froggattella kirbii*.

Silky Hairstreak *Pseudalmenus chlorinda*

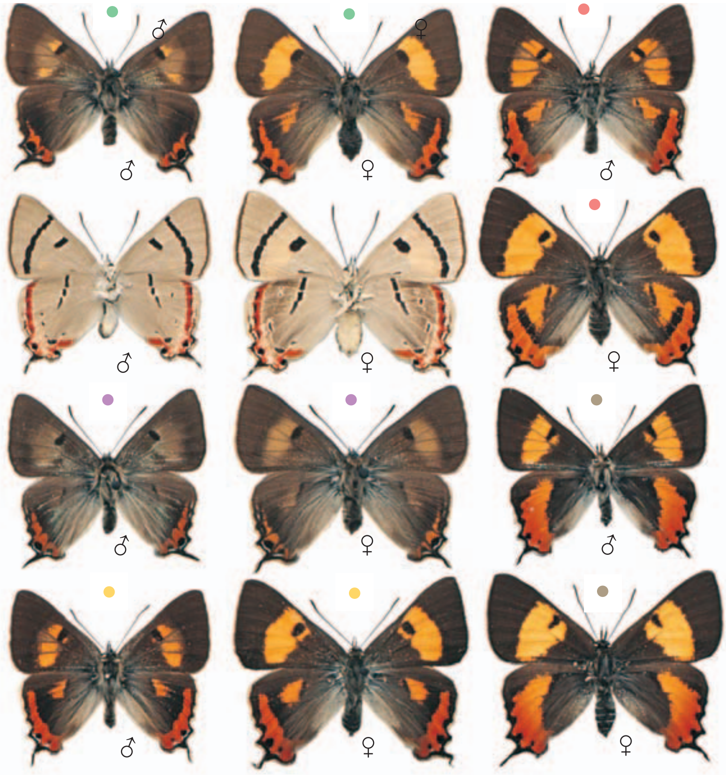
	J	A	S	O	N	D	J	F	M	A	M	J
NSW; VIC		🟧	🟧	🟧	🟧	🟧	🟧					
TAS			🟧	🟧	🟧	🟧						



Other names: Australian Hairstreak, Victorian Hairstreak, Tasmanian Hairstreak, Orange Tit. **Wingspan:** ♂ 26 mm, ♀ 29 mm. **Similar species:** none. The Silky Hairstreak has orange and red markings on the upperside, and the underside ground colour whitish-grey or pale brownish-grey, with a scarlet subterminal band on the HW. **Variation:** six subspecies. **Behaviour:** males fly rapidly during sunshine, around the tops of the breeding trees or the lower foliage of eucalypts immediately above the breeding trees, where they perch for long periods, with wings half opened, to establish territories; they also hilltop and typically perch on leaves in the canopy of the tallest tree, often many metres above the ground. One generation annually, with most adults emerging during Oct and Nov; at some localities there is a partial second generation in Dec or Jan. **Habitat:** eucalypt tall open-forest, open-forest and subalpine woodland, mainly in cool-wet montane areas of and near the Great Dividing Range on the mainland, up to 1580 m in n. NSW, but down to sea level in TAS, preferring more open areas such as small clearings or the edges of the forest where the larval food plants are colonising or regenerating, and mature eucalypts are available for pupation and colonies of the attendant ant. **Status:** common but very local; some populations threatened in TAS. **Larval food plants:** usually *Acacia melanoxylon*, *A. dealbata* on the mainland; occasionally *A. decurrens*, *A. elata*, *A. mearnsii*, *A. obtusifolia*, *A. pravissima*, *A. terminalis*, *A. trachyphloia*; usually *A. dealbata* in TAS. **Larval attendant ant:** *Anonychomyrma biconvexa*.

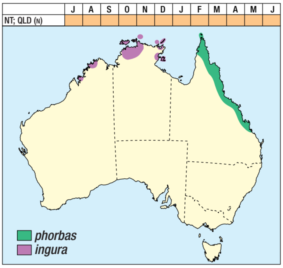


Inland Hairstreak



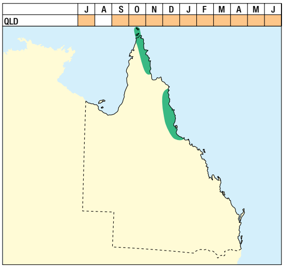
Silky Hairstreak

Black-spotted Flash *Hypolycaena phorbas*



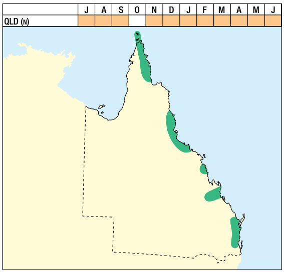
Other name: Common Tit. **Wingspan:** ♂ 29 mm, ♀ 31 mm. **Similar species:** Indigo Flash. Black-spotted Flash males have a black central patch on the FW upperside, the underside ground colour pale grey, and the HW with two tails. **Variation:** two subspecies. **Behaviour:** adults fly rapidly, and may feed from flowers of *Lumnitzera* and *Excoecaria*. Males perch in particular places of trees, such as the end of twigs, to establish territories. Probably several generations completed annually. **Habitat:** wide variety of habitats, including mangrove, rainforest edge, eucalypt open-forest and savannah woodland in coastal and subcoastal areas, wherever colonies of the Green Tree Ant are established; also suburban parkland. **Status:** common but local. **Larval food plants:** *Senna, Lumnitzera, Terminalia, Castanospermum, Flagellaria, Planchonia, Dendrophthoe, Aegiceras, Acmena, Syzygium, Ceriops, Cupaniopsis, Smilax, Faradaya, Clerodendrum,* **Cassia*. **Larval attendant ant:** *Oecophylla smaragdina*.

Orchid Flash *Hypolycaena danis*

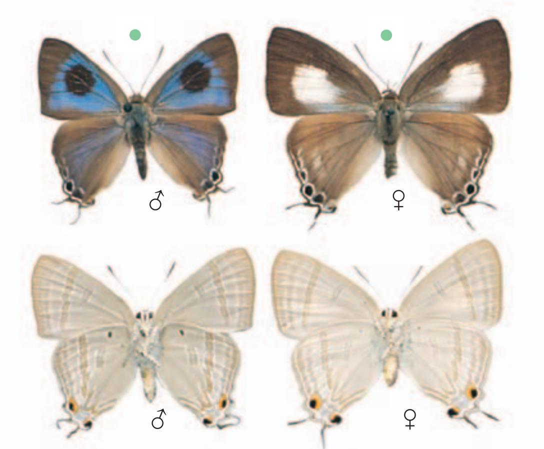


Other name: Black and White Tit. **Wingspan:** ♂ 26 mm, ♀ 26 mm. **Similar species:** none. The Orchid Flash has white central areas on the upperside, cream or pale yellow central areas on the underside, and two tails on the HW. **Behaviour:** males fly very rapidly; they establish territories along ridges or small openings within the forest where they settle on foliage 2–3 m above the ground for short periods. Females usually observed laying eggs on the larval food plant. Probably several generations completed annually. **Habitat:** upland and lowland rainforest; also suburban areas where exotic and native orchids are grown in gardens, glasshouses and shade-houses. Occurs from the Torres Strait islands to Townsville, QLD. **Status:** common but local. **Larval food plants:** *Dendrobium bigibbum, D. canaliculatum,* **Cattleya,* **Phalaenanthe,* **Phalaenopsis,* **Renanthera,* **Vanda*. **Larval attendant ant:** none.

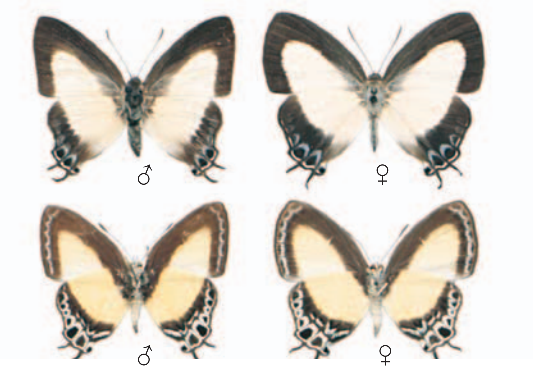
Indigo Flash *Rapala varuna*



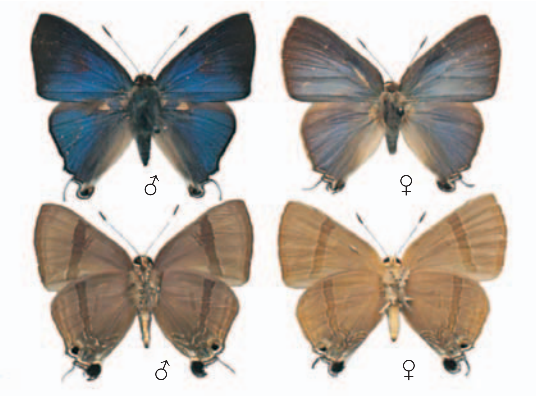
Wingspan: ♂ 29 mm, ♀ 28 mm. **Similar species:** Black-spotted Flash. Indigo Flash males have the underside ground colour dull brown, and a single tail on the HW. **Behaviour:** adults are active throughout the day. Males perch in selected places on trees growing near the larval food plant during the afternoon to establish territories; they make short frequent flights between their perching spots and the food plant. Females spend much of their time on the food plant, laying eggs or feeding from the flowers. Probably several generations completed annually; adults are abundant seasonally. **Habitat:** wide variety of habitats, including rainforest, eucalypt open-forest and savannah woodland, wherever the larval food plants grow. **Status:** common but local. **Larval food plants:** flower buds and flowers of *Elaeagnus triflora, Dendrolobium umbellatum, Pipturus argenteus, Pongamia pinnata, Acacia polystachya, Alphitonia excelsa, Eriobotrya japonia, Jagera pseudorhus,* **Albizia lebbeck,* **Litchi chinensis*; possibly *Buckinghamia celsissima, Acacia mangium*. **Larval attendant ant:** very occasionally **Technomyrmex*.



Black-spotted Flash

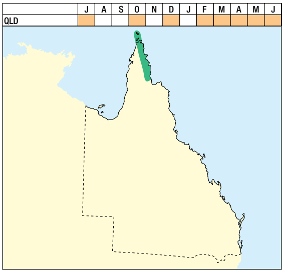


Orchid Flash



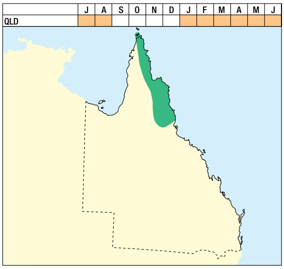
Indigo Flash

Orange-lobed Flash *Deudorix epirus*



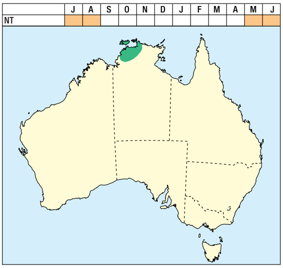
Other names: Red-lobed Flash, Blue Cornelian. **Wingspan:** ♂ 32 mm, ♀ 32 mm. **Similar species:** White-spotted Flash. The Orange-lobed Flash has the HW tornus with a dull orange lobe, and a broad triangular-shaped dark brown median patch on the FW underside. **Behaviour:** males seldom fly, perching for long periods within the dense foliage of particular shrubs. Females have been observed to fly around the larval food plant. Number of generations completed annually not recorded. **Habitat:** tropical rainforest, where the larval food plant grows as a small straggling tree in the understorey. **Status:** rarely seen and restricted to the Torres Strait islands and Cape York Peninsula, from Cape York to the Rocky River and Coen, QLD. **Larval food plant:** seeds within fruits of *Harpullia ramiflora*. **Larval attendant ant:** none.

White-spotted Flash *Deudorix democles*

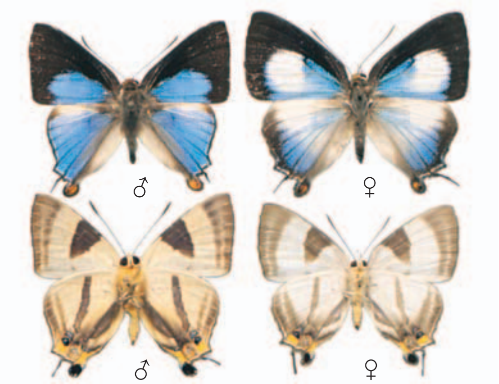


Wingspan: ♂ 30 mm, ♀ 37 mm. **Similar species:** Princess Flash, Orange-lobed Flash. The White-spotted Flash has the upperside blue areas more extensive, and the FW underside postmedian band of spots straighter and more continuous compared to the Princess Flash; females have the FW upperside white central patch larger. **Behaviour:** adults fly swiftly. Number of generations completed annually not recorded; adults are seasonal, being absent during the mid to late dry season when the larval food plants flower. **Habitat:** edges of monsoon forest (vine thicket) in the drier inland areas and on Cape York Peninsula, QLD, where the larval food plant grows as a small tree; rainforest edge in wet coastal areas of the Wet Tropics, QLD, where the larval food plant grows as a scrambler or treetop climber. **Status:** rarely seen and local. **Larval food plants:** seeds within fruits of *Strychnos lucida* on Cape York Peninsula; *S. minor* in the Wet Tropics. **Larval attendant ant:** very occasionally *Crematogaster*.

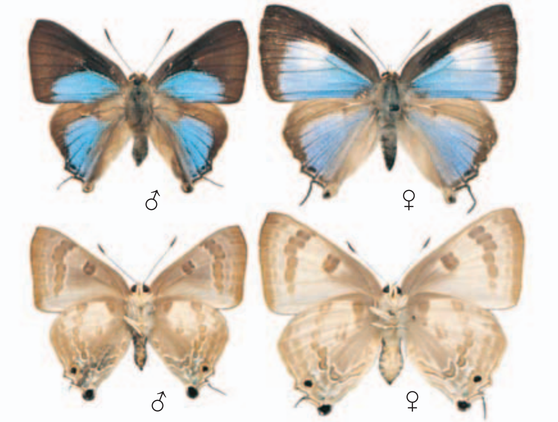
Princess Flash *Deudorix smilis*



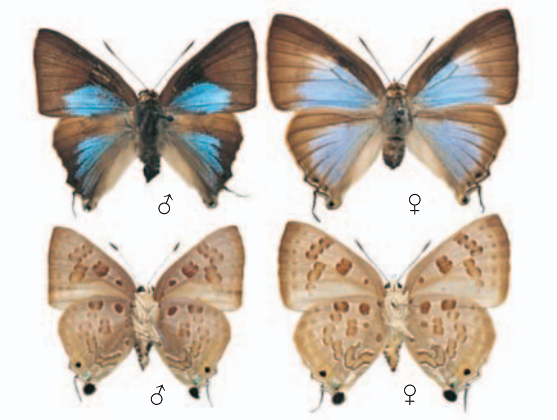
Wingspan: ♂ 30 mm, ♀ 35 mm. **Similar species:** White-spotted Flash. The Princess Flash has a red-brown spot in the FW underside cell, and the FW underside postmedian band of spots distinctly displaced at vein M_3. **Behaviour:** adults have occasionally been collected whilst feeding from flowers. Number of generations completed annually not recorded; adults are very seasonal, being present for only a few months in the early dry season. **Habitat:** monsoon forest (vine thicket), where the larval food plant grows as a tree up to 15 m high. **Status:** rarely seen and local. **Larval food plant:** seeds within fruits of *Strychnos lucida*. **Larval attendant ant:** very occasionally small black ants.



Orange-lobed Flash

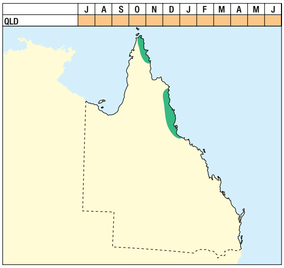


White-spotted Flash



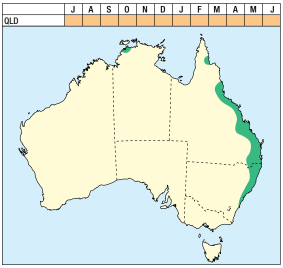
Princess Flash

Dark Cornelian *Deudorix epijarbas*



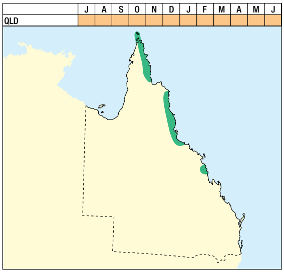
Other name: Dull Cornelian. **Wingspan:** ♂ 30 mm, ♀ 31 mm. **Similar species:** Bright Cornelian. The Dark Cornelian has white, rather than orange and white, scales on the head between the eyes, and the underside ground colour with a rich purple sheen; males have the upperside colour dull red; females have the upperside colour darker grey-brown. **Behaviour:** males have been observed flying high in the forest canopy, and on the summits of hilltops. Probably several generations completed annually. **Habitat:** upland and lowland rainforest, where the larval food plants grow. **Status:** rarely seen and local. **Larval food plants:** seeds within fruits of *Caryota albertii* on Cape York Peninsula; *Connarus conchocarpus, Salacia disepala, Sarcopteryx martyana, *Litchi chinensis* in montane areas of the Wet Tropics, QLD; *Salacia chinensis* in coastal areas. **Larval attendant ant:** none.

Bright Cornelian *Deudorix diovis*

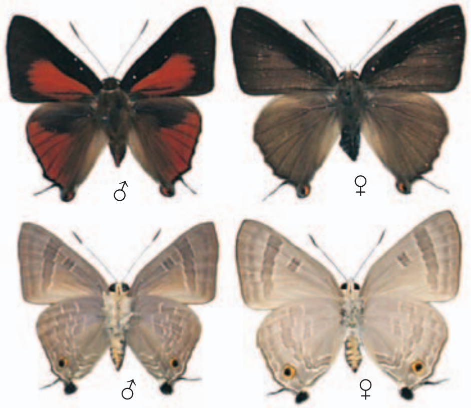


Wingspan: ♂ 30 mm, ♀ 31 mm. **Similar species:** Dark Cornelian. The Bright Cornelian has orange and white, rather than white, scales on the head between the eyes, and the HW underside iridescent bluish-green suffusion near the tornus more extensive; males have the upperside colour bright orange-red; females have the upperside colour paler grey. **Behaviour:** adults fly rapidly. Males perch high up around the tops of the breeding trees, usually on the tips of twigs, during the afternoon to establish territories; when settled they perch with head oriented slightly downwards and wings half opened; they also commonly hilltop in the afternoon, perching on branches and leaves, about 3 m or more above the ground, for long periods. Females fly more slowly and flutter inside the canopy of the larval food plant; they occasionally feed from flowers, including *Buckinghamia*. At least two or more generations completed annually. **Habitat:** monsoon forest (vine thicket), rainforest and riparian closed-forest; also suburban areas where the larval food plants are commonly grown as street trees. **Status:** common but local; less common south of the Manning River near Taree, NSW. **Larval food plants:** seeds within fruits of *Connarus, Diploglottis, Elaeocarpus, Pittosporum, Buckinghamia, Macadamia, Stenocarpus, Alectryon, Arytera, Cupaniopsis, Harpullia, *Litchi chinensis*. **Larval attendant ants:** occasionally *Iridomyrmex, Paratrechina, Polyrhachis, Crematogaster, Tetramorium, *Pheidole megacephala, *Technomyrmex.*

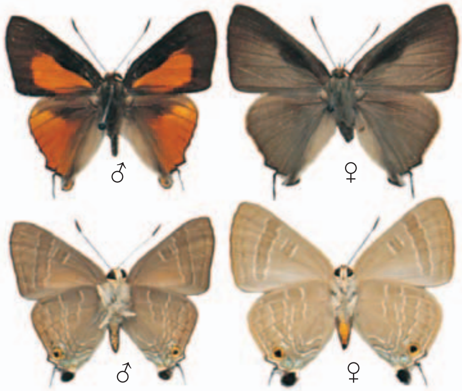
Sword-tailed Flash *Bindahara phocides*



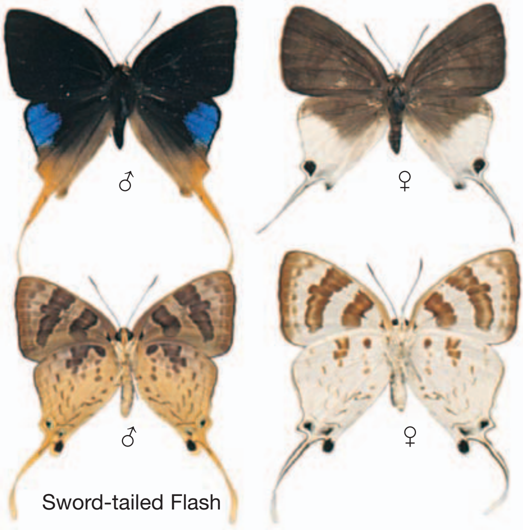
Other name: Australian Plane. **Wingspan:** ♂ 28 mm, ♀ 30 mm. **Similar species:** none. The Sword-tailed Flash has a single long tail on the HW. **Behaviour:** adults have a rapid jerky flight. Males often settle high above the ground on the end of a twig in the forest canopy. Females more often seen flying around the larval food plant or feeding nearby from flowers. Number of generations completed annually not recorded. Breeding appears to be continuous, although availability of fruits of the larval food plants varies seasonally. **Habitat:** lowland rainforest in coastal areas, preferring sandy foreshores and beachfronts where the larval food plant grows as a vigorous woody scrambler or vine; upland rainforest in montane areas. **Status:** generally uncommon and local. **Larval food plants:** seeds within fruits of *Celastrus subspicata, Salacia disepala* in montane areas; *S. chinensis* in coastal areas. **Larval attendant ant:** none.



Dark Cornelian

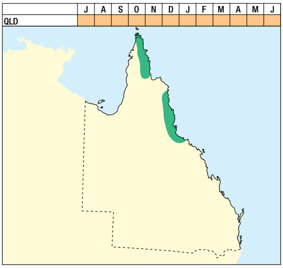


Bright Cornelian



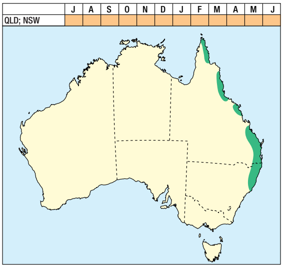
Sword-tailed Flash

Shining Pencil-blue *Candalides helenita*



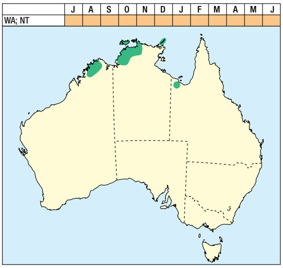
Other name: Helenita Blue. **Wingspan:** ♂ 29 mm, ♀ 28 mm. **Similar species:** pencil-blues, Large Moonbeam. Shining Pencil-blue females have the HW upperside white central patch reaching the apex, and the underside brown-black markings fainter. They have the FW upperside blue basal suffusion less extensive or absent compared to Trident Pencil-blue females. **Behaviour:** adults fly in the understorey along creeks or edges of the forest in filtered sunlight. Males are often observed patrolling or flying around each other in open sunny areas; typically two males engage in a distinctive flight pattern in which each male flies alternatively above and below the other for some period. Number of generations completed annually not recorded. **Habitat:** lowland rainforest, gallery forest and the ecotone between rainforest and tall open-forest, usually below 700 m, where the larval food plants grow. **Status:** common but local. **Larval food plants:** new soft leaves of *Glochidion ferdinandi*, *Cryptocarya hypospodia*, *Arytera pauciflora*, *Brachychiton acerifolius* in the Wet Tropics, QLD. **Larval attendant ant:** none.

Trident Pencil-blue *Candalides margarita*

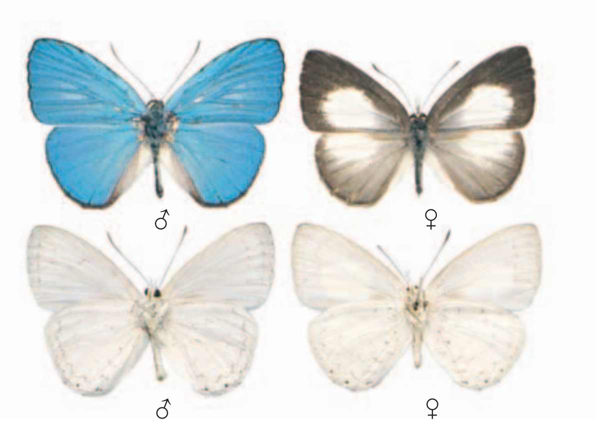


Other name: Margarita Blue. **Wingspan:** ♂ 30 mm, ♀ 30 mm. **Similar species:** pencil-blues. Trident Pencil-blue males have the FW upperside sex-brand as a clearly visible trident patch on the veins, and the HW termen squarer compared to Common Pencil-blue males. Females have the HW upperside white central patch reaching the apex. They have the FW upperside blue basal suffusion more extensive compared to Shining Pencil-blue females. **Behaviour:** adults have a rapid, vigorous flight. Males regularly fly on hilltops where they perch on leaves of trees about 4 m or more from the ground to establish territories; when settled they often perch facing an open area, with head oriented slightly downwards and wings closed. Probably several generations completed annually; adult abundance varies seasonally. **Habitat:** rainforest and open-forest in upland and lowland areas, where the mistletoe food plants grow as parasitic shrubs on various trees. **Status:** common but local. **Larval food plants:** young soft shoots of *Amyema congener*, *A. conspicua*, *A. miquelii*, *Amylotheca dictyophleba*, *Benthamina alyxifolia*, *Dendrophthoe curvata*, *D. vitellina*, *Muellerina celastroides*. **Larval attendant ants:** very occasionally *Iridomyrmex*, *Polyrhachis australis*, *Technomyrmex sophiae*, **Technomyrmex*.

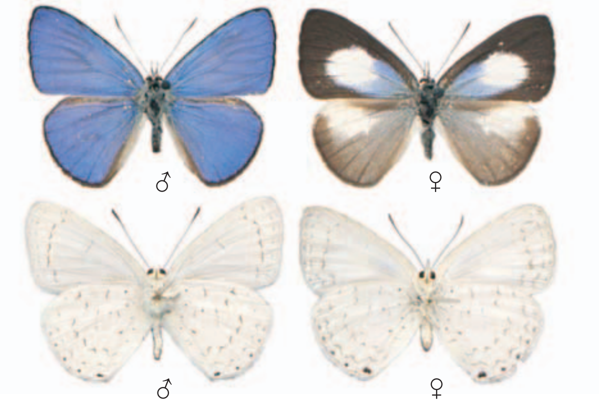
Northern Pencil-blue *Candalides gilberti*



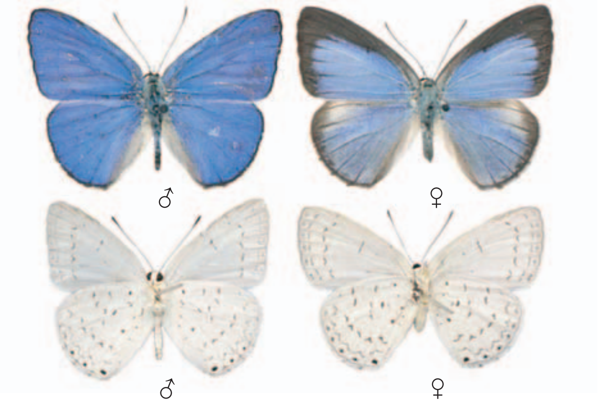
Other name: Gilbert's Blue. **Wingspan:** ♂ 29 mm, ♀ 30 mm. **Similar species:** Trident Pencil-blue. Northern Pencil-blue males have the underside markings more distinct, and the FW termen straighter with the apex more pointed. **Behaviour:** males commonly fly on hilltops. Probably several generations completed annually; adult abundance varies seasonally depending on availability of flower buds and young soft shoots of the larval food plant. **Habitat:** eucalypt open-forest and savannah woodland, where the mistletoe food plant grows as a parasitic shrub on *Alstonia actinophylla* and eucalypts; also suburban parkland. **Status:** common but local. **Larval food plant:** flower buds and young soft shoots of *Decaisnina signata*. **Larval attendant ant:** very occasionally *Crematogaster*.



Shining Pencil-blue



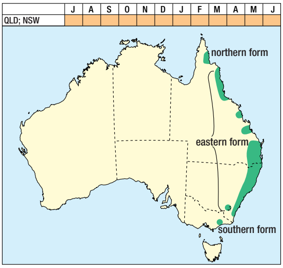
Trident Pencil-blue



Northern Pencil-blue

Common Pencil-blue *Candalides absimilis*

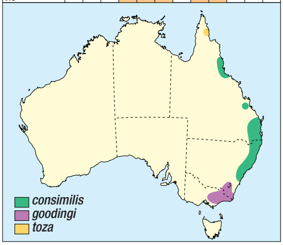
	J	A	S	O	N	D	J	F	M	A	M	J
QLD; NSW	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧



Wingspan: ♂ 30 mm, ♀ 31 mm. **Similar species:** pencil-blues. Common Pencil-blue females have the HW upperside white central patch usually larger, rarely suffused with blue, compared to Dark Pencil-blue females. **Variation:** three geographical forms. **Behaviour:** adults fly rapidly around the larval food plants; they often settle high up for short periods on leaves in sunlit gaps in the forest; when settled they may bask with wings half opened. Females fly more slowly, sometimes descending closer to ground. Probably several generations completed annually; adult abundance varies seasonally depending on availability new growth of the larval food plants. **Habitat:** usually edges of rainforest and gallery forest; also coastal eucalypt open-forest and suburban gardens in Brisbane and Sydney where the larval food plants are established. **Status:** common but local. **Larval food plants:** new soft leaves or flower buds of *Castanospermum, Erythrina, Millettia, Pongamia, Flagellaria, Macadamia, Stenocarpus, Alectryon, Atalaya, Cupaniopsis, Harpullia, Brachychiton, *Cassia, *Robinia, *Senna, *Wisteria, *Koelreuteria*. **Larval attendant ant:** very occasionally *Crematogaster*.

Dark Pencil-blue *Candalides consimilis*

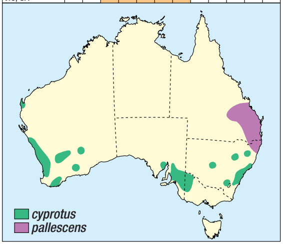
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE); NSW		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧			
VIC				🟧	🟧	🟧		🟧	🟧			



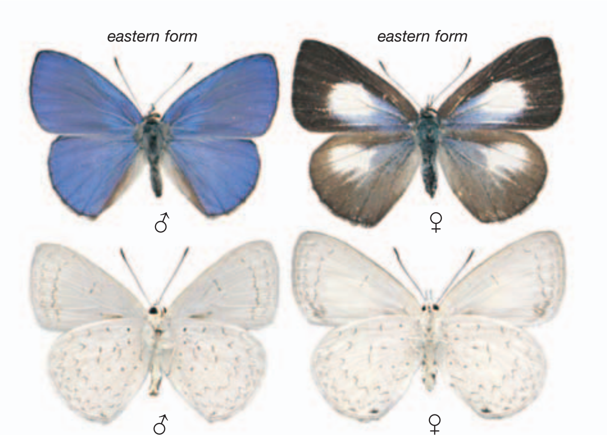
Other name: Consimilis Blue. **Wingspan:** ♂ 29 mm, ♀ 30 mm. **Similar species:** pencil-blues. Dark Pencil-blue males have the FW sex-brand as a broad, diffuse dark patch. Females have the HW upperside white central patch suffused with purplish-blue. **Variation:** three subspecies. **Behaviour:** males fly rapidly on hilltops where they perch on foliage of trees several metres above the ground; when settled the wings may be closed or opened slightly. One generation annually in VIC, with most adults emerging in Nov, followed by a partial second generation in Feb–Mar. **Habitat:** usually rainforest edge, or sometimes open-forest adjacent to rainforest, in mountains and coastal areas of QLD and NSW; eucalypt tall open-forest in ACT and VIC. **Status:** common but very local; rare in ne. QLD. **Larval food plants:** flower buds and flowers of *Alectryon coriaceus* in se QLD; *Ceratopetalum gummiferum, *Hedera helix, Polyscias elegans, P. sambucifolius* near Sydney, NSW; *P. sambucifolius* in c. VIC. **Larval attendant ant:** none.

Copper Pencil-blue *Candalides cyprotus*

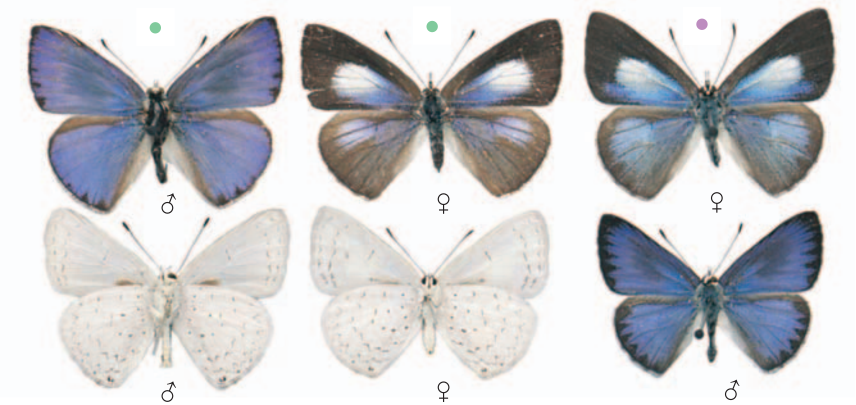
	J	A	S	O	N	D	J	F	M	A	M	J
QLD; NSW		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧			
VIC; SA			🟧	🟧	🟧	🟧	🟧					



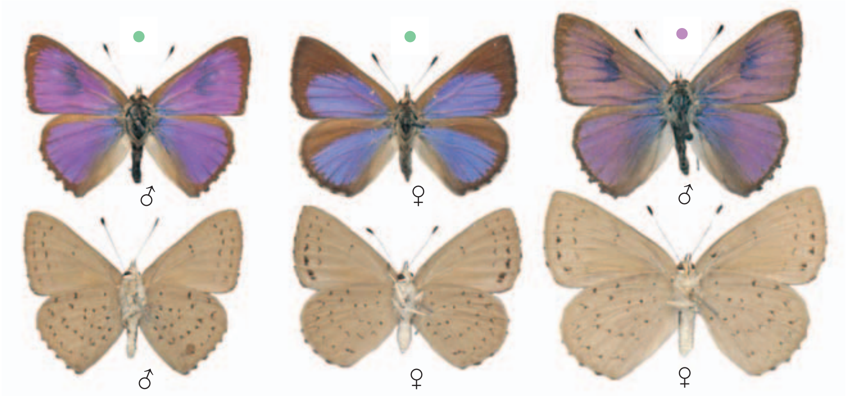
Other name: Cyprotus Blue. **Wingspan:** ♂ 27 mm, ♀ 28 mm. **Similar species:** none. **Variation:** two subspecies, both variable in upperside colour. **Behaviour:** adults fly during sunshine, close to ground. Males commonly hilltop on sand dunes and sand ridges where they perch, with wings closed, on foliage and twigs of small shrubs to establish territories. Females frequently rest on the ground or amongst low vegetation at or close to the breeding areas; when settled they may bask, with wings half opened. One generation annually in temperate areas, with adults emerging mainly in spring; they are very seasonal, flying for only 3–4 weeks at any one location. **Habitat:** heathland or open-woodland with a heath understorey on sandstone, in the tablelands and coast in NSW; mallee-heath and mallee tall shrubland in semi-arid areas, where the larval food plants grow as shrubs in the understorey on sandy soil. **Status:** uncommon and very local. **Larval food plants:** flower buds and flowers of *Jacksonia scoparia* in se. QLD; *Conospermum taxifolium* in cc. NSW; *Grevillea juniperina* in subcoastal s. NSW; *G. huegelii, Hakea leucoptera* in SA; *G. bracteosa* in WA. **Larval attendant ant:** none.



Common Pencil-blue



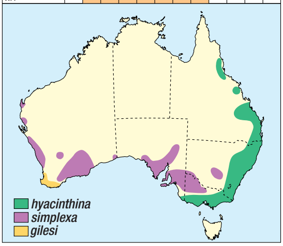
Dark Pencil-blue



Copper Pencil-blue

Varied Dusky-blue *Candalides hyacinthina*

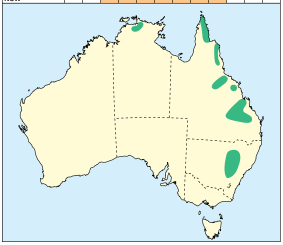
	J	A	S	O	N	D	J	F	M	A	M	J
NSW; VIC		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		
WA		🟧	🟧	🟧	🟧	🟧	🟧	🟧				



Other names: Common Dusky-blue, Western Dusky-blue. **Wingspan:** ♂ 28 mm, ♀ 28 mm. **Similar species:** Twin Dusky-blue, Small Dusky-blue, Blotched Dusky-blue. The Varied Dusky-blue has the underside spots and markings larger, especially the median and postmedian series on the HW, compared to the Twin Dusky-blue. **Variation:** three subspecies; *C. h. hyacinthina* females vary in extent and colour of upperside central area. **Behaviour:** adults usually fly close to patches of the larval food plant. Males strongly hilltop and perch close to the ground on sticks, stones and dead branches or foliage of shrubs in sunlit areas to establish territories; when settled they readily bask, widely opening their wings. Several generations completed annually, even in temperate zone, with adults emerging from late winter. **Habitat:** wide variety of habitats, including upland tall open-forest and the ecotone between open-forest and rainforest in ne. QLD, eucalypt open-forest, woodland and heathland on the eastern coast and tablelands, mixed mallee woodland and heathland in inland semi-arid and arid areas, jarrah open-forest and woodland in se. WA, wherever the larval food plants grow as a scrambling parasitic vines. **Status:** common but local. **Larval food plants:** *Cassytha pubescens* in coast and tablelands of e. Australia; *C. melantha* mainly in inland areas of NSW, VIC and SA, but also near Melbourne; *C. peninsularis* and *C. flindersii* in more arid areas of SA; *C. racemosa* in sw. WA. *C. aurea* in North-West Cape, WA. **Larval attendant ant:** very occasionally *Ochetellus*.

Twin Dusky-blue *Candalides geminus*

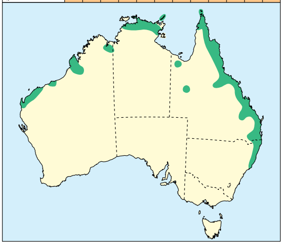
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (N)	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
NSW			🟧	🟧	🟧	🟧	🟧	🟧	🟧			



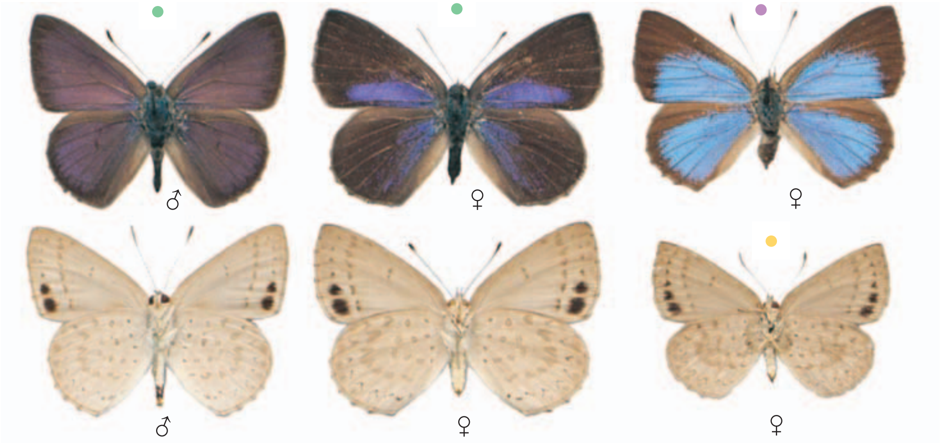
Other name: Large Dusky-blue. **Wingspan:** ♂ 26 mm, ♀ 27 mm. **Similar species:** Varied Dusky-blue, Small Dusky-blue. The Twin Dusky-blue has the underside ground colour paler grey, with the spots and markings smaller, especially the median and postmedian series on the HW, and the FW underside brown-black subtornal spots surrounded by white compared to the Varied Dusky-blue. **Variation:** upperside central area varies in extent and colour in females. **Behaviour:** adults fly in the understorey close to patches of the larval food plant. Several generations completed annually. **Habitat:** eucalypt open-forest, woodland and open-woodland, where the larval food plant grows as a scrambling parasitic vine. **Status:** common but local. **Larval food plant:** *Cassytha pubescens*. **Larval attendant ant:** none.

Small Dusky-blue *Candalides erinus*

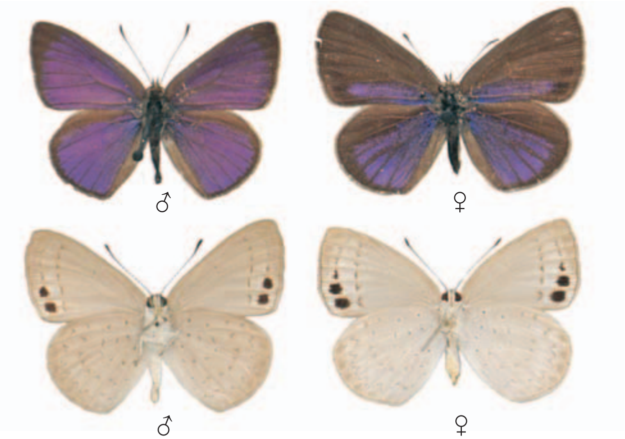
	J	A	S	O	N	D	J	F	M	A	M	J
WA; NT	🟧	🟧	🟧	🟧			🟧	🟧	🟧	🟧	🟧	🟧
QLD	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧



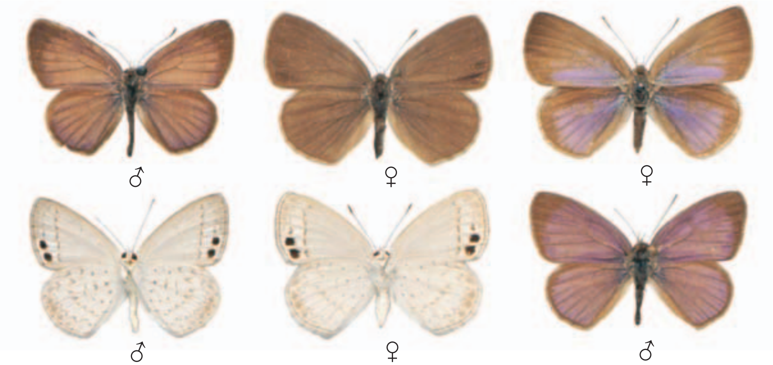
Wingspan: ♂ 22 mm, ♀ 22 mm. **Similar species:** Varied Dusky-blue, Twin Dusky-blue. The Small Dusky-blue is smaller, has the underside ground colour paler, and a dull white postmedian band on the HW underside with the postmedian line of markings straight; males have the FW apex more rounded. **Variation:** upperside central and basal area varies in colour in females. **Behaviour:** adults fly in the understorey close to patches of the larval food plant. Several generations completed annually. **Habitat:** coastal heathland, paperbark swampland and savannah woodland, usually not far from the coast where patches of the larval food plants grow as scrambling parasitic vines. **Status:** common but local. **Larval food plants:** *Cassytha filiformis* in se. QLD, *C. pubescens* in ne. QLD, *C. aurea, C. capillaris* in n. WA. **Larval attendant ant:** very occasionally small black ants.



Varied Dusky-blue



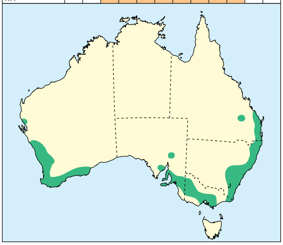
Twin Dusky-blue



Small Dusky-blue

Blotched Dusky-blue *Candalides acasta*

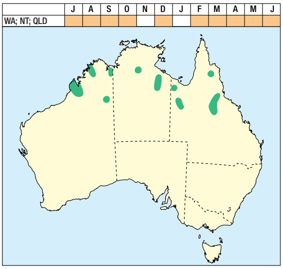
	J	A	S	O	N	D	J	F	M	A	M	J
NSW		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		
WA			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		



Wingspan: ♂ 22 mm, ♀ 22 mm. **Similar species:** Varied Dusky-blue. The Blotched Dusky-blue is smaller, has the FW underside brown-black subtornal spots indistinct, and a diffuse dark grey-brown patch near the termen on the HW underside. **Variation:** extent of purple central and basal areas varies seasonally in females. **Behaviour:** adults fly close to patches of the larval food plant with a slow jerky flight; they frequently settle on the ground or on low shrubs. Males commonly hilltop on sand dunes and sand ridges where they perch on low vegetation close to the ground. Probably one or two generations completed annually, with adults most abundant in spring. **Habitat:** heathland on sand in both coastal and semi-arid areas, and mixed eucalypt woodland with a heath understorey, from sea level to about 300 m in TAS and 800 m in ACT, where the usual larval food plant grows as a very fine, low-growing parasitic vine. **Status:** common but local. **Larval food plants:** usually *Cassytha glabella* in se. Australia and TAS; also *C. filiformis, C. pubescens, C. peninsularis*. **Larval attendant ant:** none.

Spotted Dusky-blue *Candalides delospila*

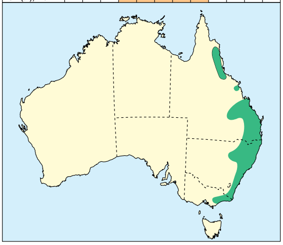
	J	A	S	O	N	D	J	F	M	A	M	J
WA; NT; QLD	🟧	🟧	🟧	🟧		🟧		🟧	🟧	🟧	🟧	🟧



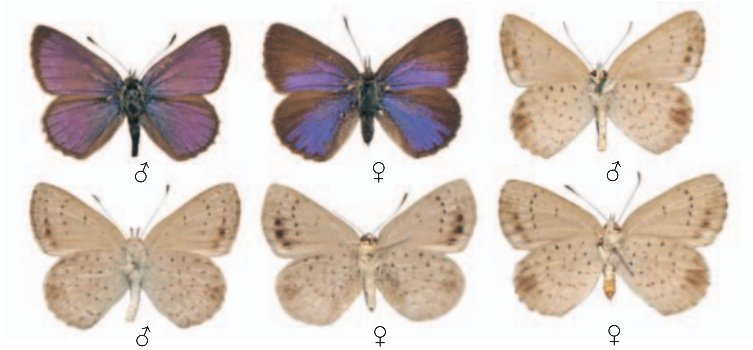
Wingspan: ♂ 17 mm, ♀ 17 mm. **Similar species:** none. The Spotted Dusky-blue has the termen of both wings rounded with the scale-fringe chequered brown and white, and the underside markings and spots more clearly defined. **Behaviour:** adults fly during sunshine, within or close to the breeding areas; they fly close to the ground amongst grass and low shrubs, and may feed from flowers; they are most active around midday, remaining settled on stems of *Triodia* for long periods at other times of the day, in late autumn; during the morning they settle close to the ground to bask in the sunlight. Males have been noted to congregate on sandstone ridges. Probably one or two generations completed annually, with adults seasonal, being most abundant during autumn and winter. **Habitat:** open-woodland and tussock grassland on sandy soils, laterite or sandstone escarpments in low rainfall areas of the inland, where the larval food plants grow as fine parasitic vines over clumps of spinifex. **Status:** common but very local. **Larval food plant:** *Cassytha filiformis* in QLD; *C. capillaris* in n. WA. **Larval attendant ant:** none.

Yellow-spotted Blue *Candalides xanthospilos*

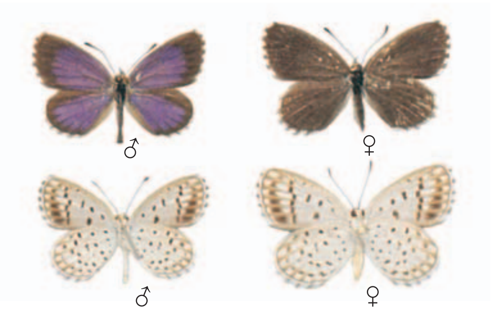
	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE); NSW (N)		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		
NSW (SE); VIC				🟧	🟧	🟧	🟧	🟧				



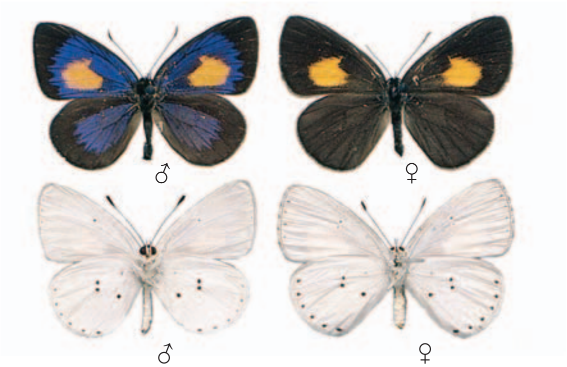
Wingspan: ♂ 24 mm, ♀ 26 mm. **Similar species:** none. The Yellow-spotted Blue has an orange-yellow spot on the FW upperside. **Behaviour:** adults fly close to the ground amongst shrubs and undergrowth, including the larval food plant; they often settle on the ground or on low shrubs to bask with wings partly opened towards the sun. Probably one generation annually, followed by a partial second generation in se. NSW and e. VIC, with adults most abundant in late spring and summer. **Habitat:** eucalypt tall open-forest and open-forest, sometimes with a heath understorey, on well-drained soils, mainly in coastal and subcoastal areas, preferring fairly open areas where the larval food plants grow as small shrubs. **Status:** common but local. **Larval food plants:** usually *Pimelea linifolia*; also *P. ligustrina, P. stricta*. **Larval attendant ant:** very occasionally small black ants.



Blotched Dusky-blue

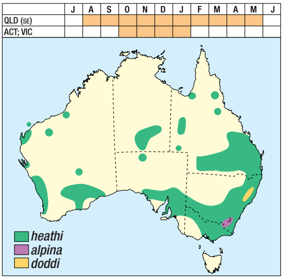


Spotted Dusky-blue



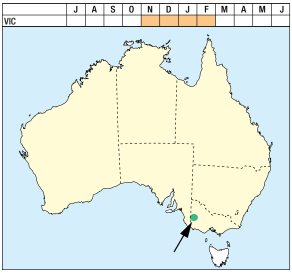
Yellow-spotted Blue

Rayed Blue *Candalides heathi*



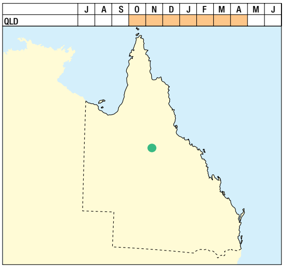
Wingspan: ♂ 28 mm, ♀ 29 mm. **Similar species:** Golden-rayed Blue. **Variation:** three subspecies, each variable. **Behaviour:** adults fly rapidly close to the ground, usually in the breeding areas. One generation annually in ACT, with adults emerging in spring or early summer depending on altitude, sometimes followed by a partial second generation; adult emergence variable in inland areas, often coinciding with heavy rainfall after long dry periods; flight season usually lasts only a few weeks at any one location. **Habitat:** wide variety of habitats, including coastal heathland, eucalypt woodland, brigalow woodland, subalpine woodland and mallee shrubland, where the larval food plants grow as small shrubs or as ground cover plants in the more open areas. **Status:** common but very local. **Larval food plants:** stunted form of *Westringia fruticosa*, *Plantago*, **Plantago lanceolata* in cc. NSW; *Derwentia derwentiana*, *D. perfoliata* in montane areas of se. Australia; *W. rigida*, *Eremophila deserti*, *E. gilesii*, *E. longifolia*, *Pimelea* in inland areas; *Prostanthera nivea* in You Yangs, VIC; *Stemodia florulenta* in nw. SA. **Larval attendant ants:** very occasionally *Iridomyrmex*.

Golden-rayed Blue *Candalides noelkeri*

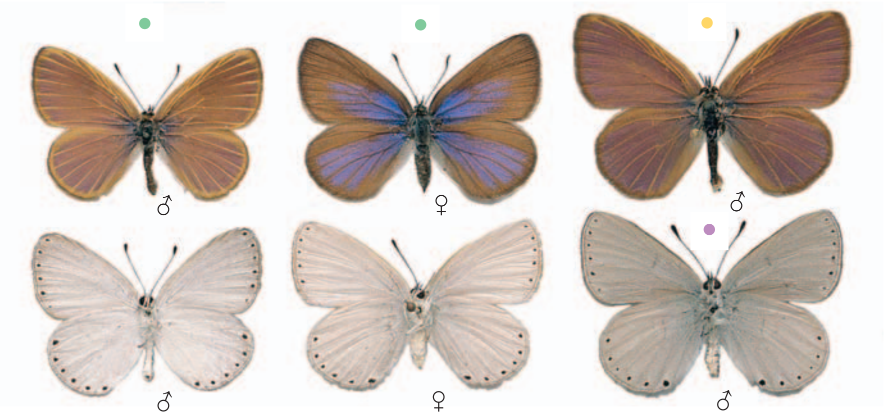


Wingspan: ♂ 25 mm, ♀ 25 mm. **Similar species:** Rayed Blue. The Golden-rayed Blue is smaller, has the underside ground colour darker brown-grey, often with variable brown streaks and bands in the outer half, and a brown transverse band along the discocellular vein of each wing; males usually have the golden-brown scales on the veins and costa of the FW more extensive. **Behaviour:** adults fly rapidly during sunshine, usually within 0.5 m of the ground, in the breeding areas; they frequently settle to feed from flowers of the larval food plant, or perch on grass stems or bare ground to bask, with wings half opened. Normally one generation annually, with adults emerging mainly in late Nov–Dec, followed by a partial second overlapping generation in Jan and early Feb. **Habitat:** open-grassland and open-sedgeland in saline flood plains bordering edges of salt-lakes, where the larval food plant grows as a low spreading ground cover plant. **Status:** common but very local and restricted to the Wimmera of w. VIC; endangered. **Larval food plant:** prostrate form of *Myoporum parvifolium*. **Larval attendant ant:** none.

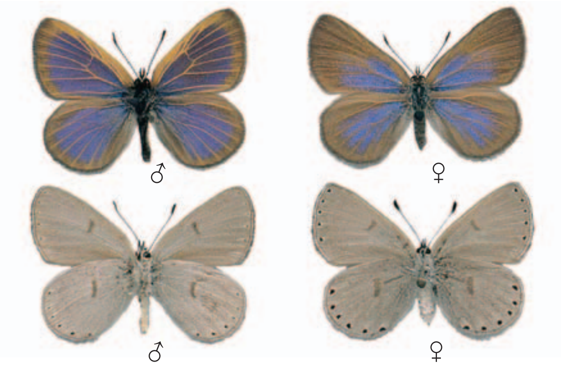
Dark Opal *Nesolycaena medicea*



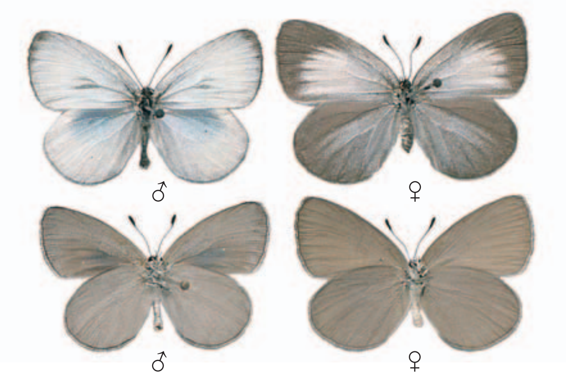
Wingspan: ♂ 28 mm, ♀ 30 mm. **Similar species:** Satin Opal. Dark Opal males have an obscure dark bluish-purple patch near the HW upperside costa and a similar patch below the FW underside cell; females have the HW upperside extensively suffused with grey-black. **Behaviour:** adults fly close to the ground in upper and lower gorges, usually close to where the larval food plant grows. Females have been observed dispersing across dry ridges separating the gorges. Probably only one or two generations completed annually in most years; adults are very seasonal and their emergence largely depends on timing of heavy rainfall events. **Habitat:** woodland in deep sandstone gorges, where the larval food plant grows in the moister, more protected areas. **Status:** common but very local and restricted to the White Mountains on the Great Dividing Range, QLD. **Larval food plant:** *Boronia eriantha*. **Larval attendant ant:** none.



Rayed Blue

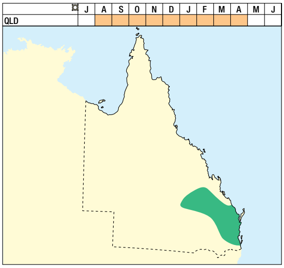


Golden-rayed Blue



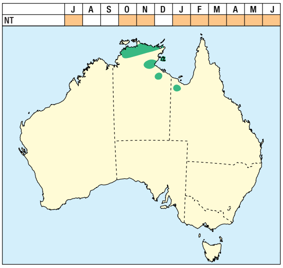
Dark Opal

Satin Opal *Nesolycaena albosericea*



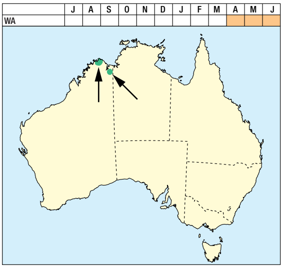
Other name: Satin Blue. **Wingspan:** ♂ 30 mm, ♀ 31 mm. **Similar species:** Dark Opal. The Satin Opal has the FW termen straighter with the apex more pointed, and the underside ground colour paler brown. **Variation:** adults are smaller in coastal areas. **Behaviour:** adults fly during sunshine, within 2 m of the ground and usually near the larval food plant; when settled they rest on dead sticks on the ground or on dead *Banksia* leaves, with wings closed; they may feed from flowers of *Boronia*. At least one generation annually, with adults having their main emergence in Aug–Sep in coastal areas and on the Blackdown Tableland, QLD; elsewhere adults emerge mainly in Sep–Oct. **Habitat:** mixed eucalypt woodland with a heath understorey on sandstone outcrops in the central highlands and inland areas, where the larval food plants grow; banksia heathland (wallum) on white sand in coastal areas. **Status:** common but very local. **Larval food plants:** *Boronia obovata* at Blackdown Tableland; *B. odorata* at Isla Gorge; *B. glabra* near Eidsvold; possibly *B. rosmarinifolia* at Fraser Island, QLD. **Larval attendant ant:** none.

Spotted Opal *Nesolycaena urumelia*

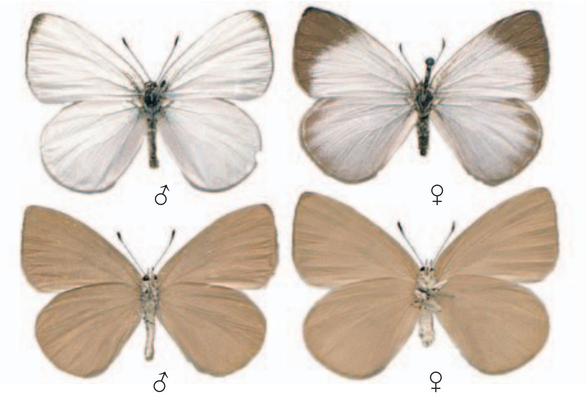


Wingspan: ♂ 24 mm, ♀ 25 mm. **Similar species:** Kimberley Spotted Opal. Spotted Opal males have the black scales of the FW sex-brand more extensive; females have the underside ground colour paler, and the FW upperside black terminal band longer, extending from the apex to vein CuA$_2$ or 1A+2A. **Behaviour:** adults fly close to the ground, often near the larval food plant, with a rather slow jerky flight. Probably several generations completed annually in most years; adults are seasonal, with breeding limited to the wet season and early dry season. **Habitat:** usually woodland on sandstone outcrops, escarpments, slopes of gorges and riparian areas, where the larval food plant grows; also open-forest on laterite soils on Gove Peninsula, NT. **Status:** common but very local. **Larval food plants:** usually *Boronia lanceolata*; also *B. lanuginosa* on Elcho Island and Groote Eylandt, NT. **Larval attendant ant:** occasionally *Monomorium*.

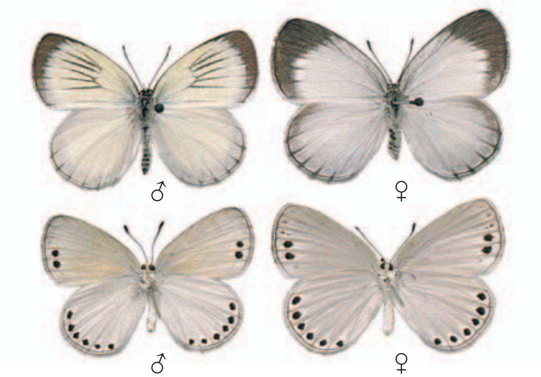
Kimberley Spotted Opal *Nesolycaena caesia*



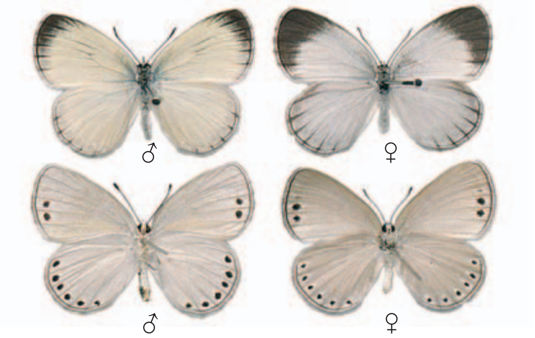
Other name: Kimberley Opal. **Wingspan:** ♂ 24 mm, ♀ 24 mm. **Similar species:** Spotted Opal. Kimberley Spotted Opal males have the FW black sex-brand less conspicuous; females have the underside ground colour darker, and the FW upperside black terminal band shorter, extending from the apex to vein CuA$_1$ or CuA$_2$. **Variation:** scales of FW sex-brand either black or white in males. **Behaviour:** adults fly close to the ground, usually around the larval food plants; they frequently settle on the sandstone with wings closed. Probably several generations completed annually in most years; adults are seasonal, with breeding limited to the wet season and early dry season. **Habitat:** woodland on sandstone outcrops and ridges, where the larval food plants grow. **Status:** common but very local and restricted to n. WA, near Kalumburu in the eastern Kimberley and near Amalia Gorge near Kununurra. **Larval food plants:** *Boronia kalumburensis, B. wilsonii*. **Larval attendant ant:** occasionally *Iridomyrmex*.



Satin Opal

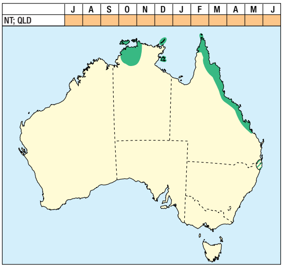


Spotted Opal



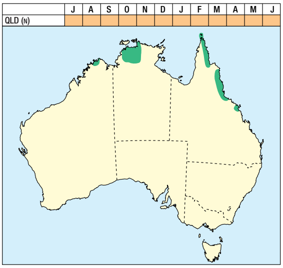
Kimberley Spotted Opal

Dark Ciliate-blue *Anthene seltuttus*



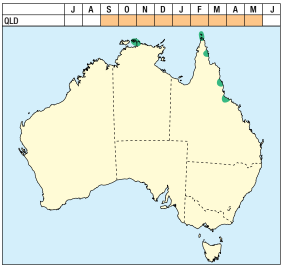
Wingspan: ♂ 24 mm, ♀ 23 mm. **Similar species:** Pale Ciliate-blue. The Dark Ciliate-blue has the FW underside postmedian band more irregular and distinctly broken at vein CuA_2; males have the upperside colour richer purple, and two black tornal spots on the HW upperside. **Variation:** extent of blue basal suffusion on FW upperside varies seasonally in females. **Behaviour:** adults usually reside close to the larval food plant. Probably several generations completed annually. **Habitat:** lowland rainforest and monsoon forest (vine thicket); also suburban areas where the larval food plants are cultivated and colonies of the Green Tree Ant are established. **Status:** common but local. **Larval food plants:** new soft leaves of *Pongamia, Cryptocarya, Syzygium, Arytera, Cupaniopsis, Brachychiton, *Cassia, *Delonix, *Saraca, *Schotia, *Lagerstroemia*. **Larval attendant ant:** *Oecophylla smaragdina*.

Pale Ciliate-blue *Anthene lycaenoides*

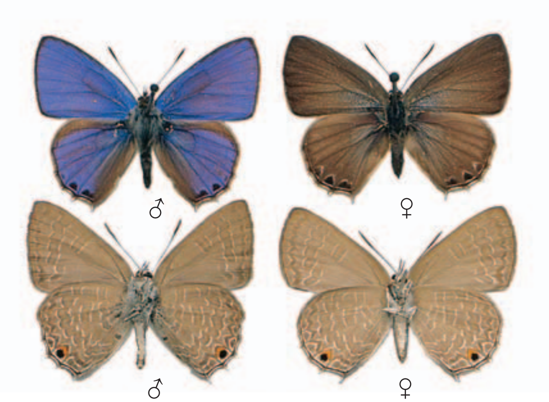


Wingspan: ♂ 24 mm, ♀ 23 mm. **Similar species:** Dark Ciliate-blue. The Pale Ciliate-blue has the FW underside postmedian band more even and unbroken at vein CuA_2; males have the upperside colour paler purple, and the FW apex and tornus more pointed. **Variation:** extent of blue and size of white central patch on FW upperside vary in females. **Behaviour:** adults reside close to the larval food plant. Probably several generations completed annually. **Habitat:** variety of habitats, mostly in coastal lowlands; also suburban areas. **Status:** common but local. **Larval food plants:** flower buds, flowers and new shoots of *Caesalpinia, Senna, Briedelia, Dendrolobium, Pongamia, Flagellaria, Rhyssopterys, Acacia, Cupaniopsis, Clerodendrum, Faradaya, *Caesalpinia, *Senna, *Calliandra, *Litchi*. **Larval attendant ants:** occasionally *Iridomyrmex*, *Ochetellus*, *Camponotus*, *Oecophylla, Opisthopsis, Paratrechina*, *Crematogaster*, *Odontomachus*.

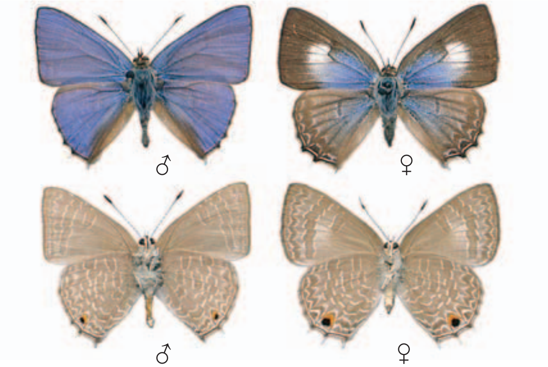
Mauve Line-blue *Petrelaea tombugensis*



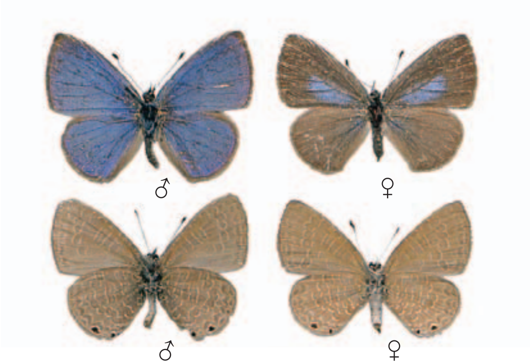
Other name: Dana Blue. **Wingspan:** ♂ 20 mm, ♀ 24 mm. **Similar species:** Large Purple Line-blue, Purple Line-blue, Long-tailed Line-blue. The Mauve Line-blue lacks a tail on the HW, and has two similar sized black subtornal spots on the HW underside. **Behaviour:** adults are most active during sunshine; they have a direct flight and their habits somewhat resemble other small line-blues, which occur in the same habitat. They are usually found flying around or perched on the upperside of the foliage, or feeding from the flowers, of species of *Terminalia*, including the larval food plant and *T. muelleri*. Males have also been observed flying closer to the ground or drinking from damp sand. Probably several generations completed annually; adults are very seasonal, being most abundant just prior to the wet season when the food plant begins to flower. **Habitat:** lowland rainforest near watercourses and monsoon forest, where the larval food plant grows. **Status:** very common but local. **Larval food plants:** flowers of *Terminalia catappa*. **Larval attendant ant:** none.



Dark Ciliate-blue

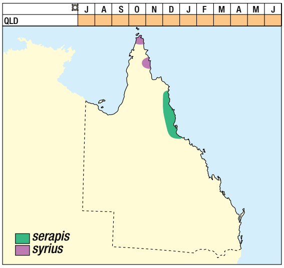


Pale Ciliate-blue



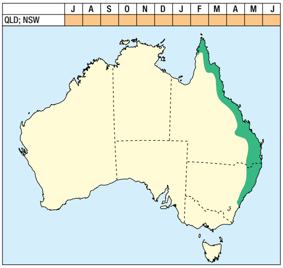
Mauve Line-blue

Large Green-banded Blue *Danis danis*



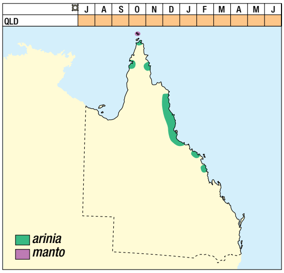
Wingspan: ♂ 36 mm, ♀ 35 mm. **Similar species:** Green-banded Line-blue, Small Green-banded Blue, White-banded Cerulean. The Large Green-banded Blue is larger, and has an iridescent green band along the costa and termen on the FW underside. It lacks a tail on the HW compared to the Green-banded Line-blue and White-banded Cerulean. **Variation:** two subspecies. **Behaviour:** adults have a relatively weak flight, usually within dark shaded areas in the understorey beneath the forest canopy; they often settle on leaves in sunlit patches close to the ground, and will feed from flowers such as *Lantana*. Probably several generations completed annually; adults are abundant seasonally. At Kuranda, QLD, two generations are completed during the dry season, with adults flying from May to Jul and again in Oct–Nov. **Habitat:** lowland and upland rainforest in higher rainfall areas, where the larval food plants grow as climbing vines close to the ground. **Status:** common but local. **Larval food plants:** new soft shoots of *Connarus conchocarpus*, *Rourea brachyandrya*, *Derris* in the Wet Tropics, QLD. **Larval attendant ant:** very occasionally small brown ants.

Small Green-banded Blue *Psychonotis caelius*

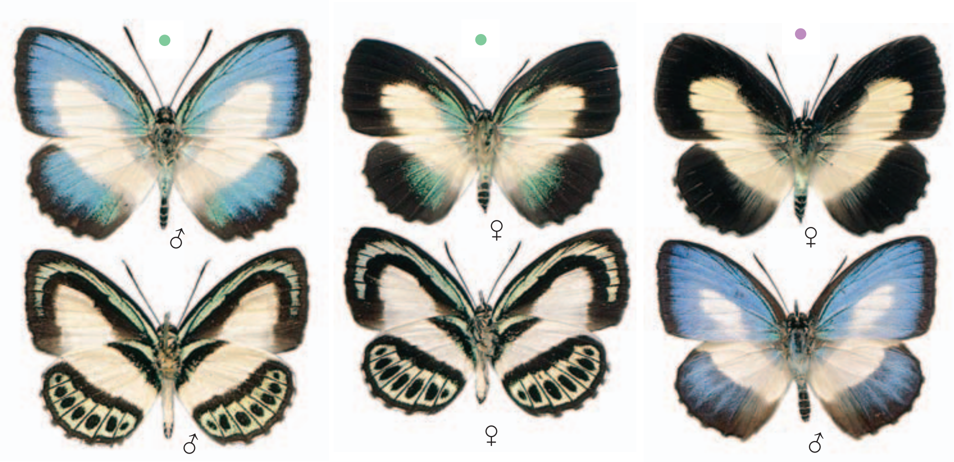


Other name: White-banded Blue. **Wingspan:** ♂ 30 mm, ♀ 32 mm. **Similar species:** Green-banded Line-blue, Large Green-banded Blue. The Small Green-banded Blue is smaller, and has an iridescent green band along the costa, which stops before the apex, on the FW underside. **Variation:** extent of iridescent greenish-blue scaling on HW upperside subtornal area, and colour of upperside iridescent basal area vary in females; extent of HW upperside white submedian band varies in males. **Behaviour:** adults have a fairly weak flight compared with other small blues; they are often seen flying around or settling on the larval food plant or feeding from flowers such as *Lantana*. Probably several generations completed annually, with adults most abundant during autumn and early winter near Sydney. **Habitat:** usually wetter rainforests, where the larval food plants grow as pioneer trees in disturbed areas or gaps in the forest; also lower rainfall areas and suburban parks and gardens where the food plants are established; remnant rainforest in wet shady gullies at Sydney. **Status:** common but local. **Larval food plants:** usually leaves but sometimes flowers of *Alphitonia excelsa*, *A. petriei*. **Larval attendant ant:** very occasionally **Technomyrmex*.

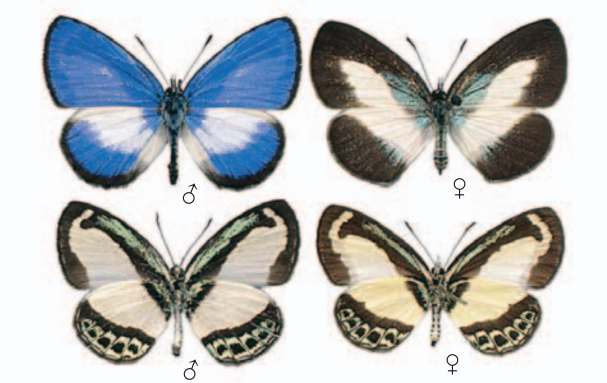
Green-banded Line-blue *Nacaduba cyanea*



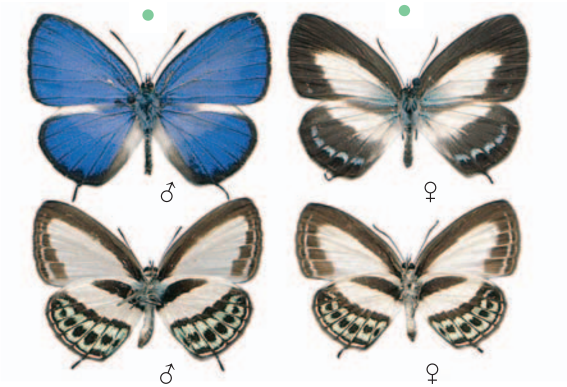
Other name: Tailed Green-banded Blue. **Wingspan:** ♂ 29 mm, ♀ 28 mm. **Similar species:** Small Green-banded Blue, Large Green-banded Blue. The Green-banded Line-blue has a tail on the HW, and the FW underside costa black, without an iridescent green band; females have a blue subterminal band on the HW upperside. **Variation:** two subspecies. **Behaviour:** adults usually fly under the forest canopy or close to the larval food plant. Number of generations completed annually not recorded; adults are abundant seasonally when the food plant produces new leaf growth. **Habitat:** edges of lowland rainforest in wetter coastal areas, where the larval food plant grows as a large woody climber in the trees, frequently along banks of streams. **Status:** common but local. **Larval food plant:** new soft shoots of *Entada phaseoloides*. **Larval attendant ant:** occasionally small black or brown ants.



Large Green-banded Blue

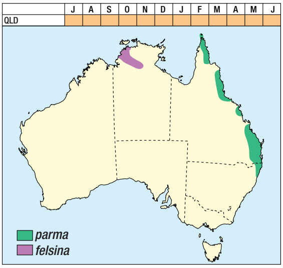


Small Green-banded Blue



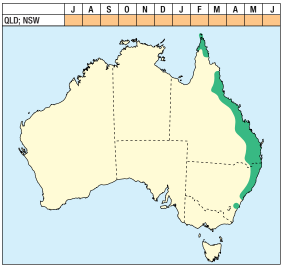
Green-banded Line-blue

White-banded Line-blue *Nacaduba kurava*



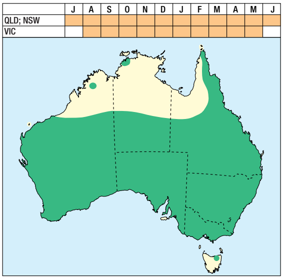
Other name: White Line-blue. **Wingspan:** ♂ 23 mm, ♀ 24 mm. **Similar species:** none. The White-banded Line-blue has a broad, irregular white postmedian band on the underside of both wings. **Variation:** two subspecies. **Behaviour:** adults have a fairly rapid flight. Males settle on twigs and small branches, head downwards, in the canopy where they establish territories. Females usually observed lower down flying slowly around or settled on branches of the larval food plant. Probably several generations completed annually; adults are abundant seasonally depending upon availability of larval food. **Habitat:** monsoon forest (vine forest) in NT, where the larval food plant grows as a rambling woody vine near permanent water; variety of rainforests in QLD, including rainforest edge; also mangrove in ne. NSW. **Status:** common but local. **Larval food plants:** new shoots or flowers of *Embelia curvinervia* in NT; *Maesa haplobotrys, M. dependens* in the Wet Tropics, QLD; *Rapanea variabilis* in coastal s. QLD; *Aegiceras corniculatum* in coastal ne. NSW; also *Cupaniopsis anacardioides*. **Larval attendant ant:** occasionally a few ants.

Large Purple Line-blue *Nacaduba berenice*

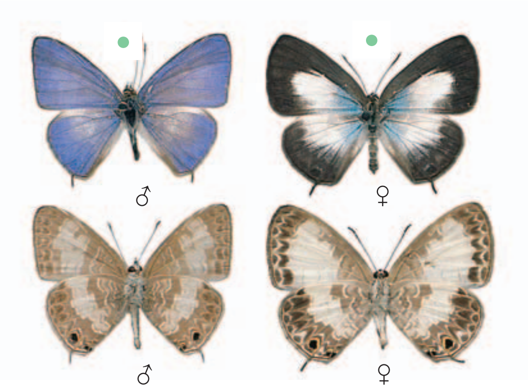


Other name: Six Line-blue. **Wingspan:** ♂ 22 mm, ♀ 22 mm. **Similar species:** Mauve Line-blue, Purple Cerulean. The Large Purple Line-blue has a tail on the HW compared to the Mauve Line-blue. It has a submedian band or central spot in the cell on the FW underside compared to the Purple Cerulean. **Behaviour:** adults have a fairly swift and erratic flight over foliage of the larval food plant; they also perch on leaves, with wings outspread to bask or with wings closed and moving the HWs alternately up and down. Males hilltop and perch on low shrubs, 1–3 m above the ground. Probably several generations completed annually. **Habitat:** coastal rainforest, gallery forest, monsoon forest (vine thicket) and tall open-forest with rainforest elements in the understorey; also suburban gardens. **Status:** common but local. **Larval food plants:** usually young terminal leaves, flower buds or sometimes young fruits of *Alectryon, Arytera, Atalaya, Cupaniopsis, Elatostachys, Jagera, Heterodendron, Guioa*; also *Macadamia, Aphananthe philippinensis* in se. QLD. **Larval attendant ants:** occasionally *Tapinoma, Camponotus, Oecophylla, Paratrechina, Polyrhachis, Crematogaster*, **Pheidole*, **Technomyrmex*.

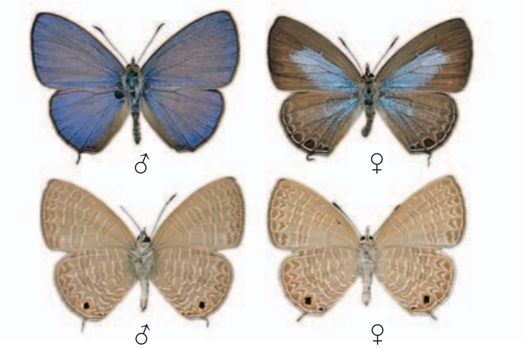
Two-spotted Line-blue *Nacaduba biocellata*



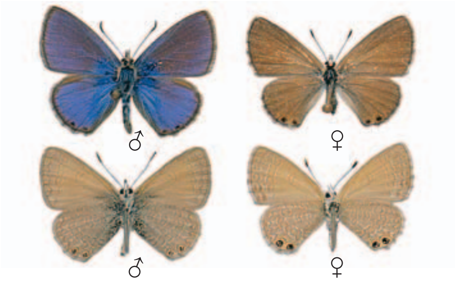
Other name: Double-spotted Line-blue, Double Spotted Blue. **Wingspan:** ♂ 17 mm, ♀ 17 mm. **Similar species:** Purple Line-blue, Short-tailed Line-blue, Small Ant-blue. The Two-spotted Line-blue has the FW underside ground colour orange-brown, without markings in the basal area, and two black subtornal spots, each with a few iridescent green scales, on the HW underside. **Behaviour:** adults fly around and settle on foliage and flowers of the larval food plant; they frequently feed from flowers of *Eucalyptus, Leptospermum, Bursaria* and the food plant. Large numbers of adults have been observed fluttering close to the ground and tree trunks beneath the canopy of the food plant just after flowering in inland areas. Probably several generations completed annually; adults may be extremely abundant seasonally depending on availability of larval food. **Habitat:** wide variety of habitats, especially acacia woodlands in inland areas; absent from rainforest and the wetter eucalypt forests. **Status:** very common and widespread. **Larval food plants:** flower buds and flowers of *Acacia*. **Larval attendant ants:** occasionally *Iridomyrmex*, **Technomyrmex*.



White-banded Line-blue

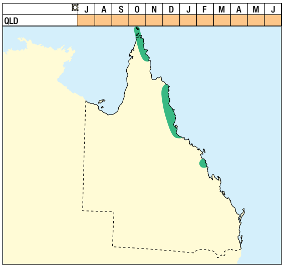


Large Purple Line-blue



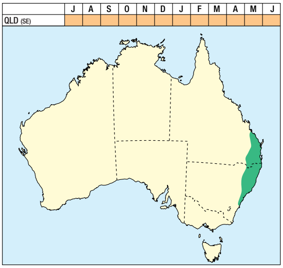
Two-spotted Line-blue

Long-tailed Line-blue *Prosotas nora*



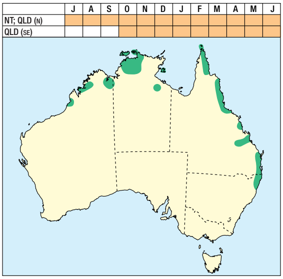
Other name: Nora Line-blue. **Wingspan:** ♂ 19 mm, ♀ 17 mm. **Similar species:** Short-tailed Line-blue, Purple Line-blue, Mauve Line-blue, Bronze Line-blue. The Long-tailed Line-blue has a long, thin tail on the HW. It has the termen of both wings more rounded than in the Bronze Line-blue. **Behaviour:** adults fly rapidly close to the ground in the more open areas, such as over river-sand or tracks, or sometimes much higher in the forest canopy. Number of generations completed annually not recorded. **Habitat:** adults have been collected in tropical rainforest on the coast and tablelands. **Status:** uncommon and local. **Larval food plant:** not recorded. Possibly *Allophylus cobbe*. **Larval attendant ant:** none.

Short-tailed Line-blue *Prosotas felderi*

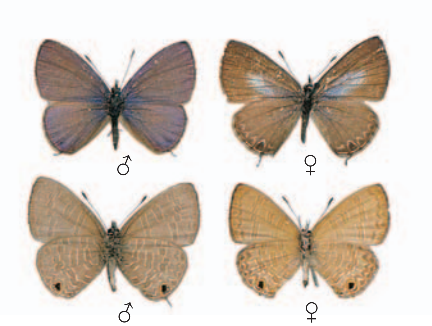


Other names: Small-tailed Line-blue, Southern Line-blue, Felder's Line-blue. **Wingspan:** ♂ 19 mm, ♀ 19 mm. **Similar species:** Long-tailed Line-blue, Purple Line-blue, Two-spotted Line-blue. The Short-tailed Line-blue has a short tail on the HW. It has the wings more pointed, the FW underside bands slightly narrower, and the HW black subtornal spot smaller compared to the Purple Line-blue. **Variation:** extent of blue central areas on upperside varies seasonally in females. **Behaviour:** adults fly in the mid canopy where they settle on the outer leaves in full sunlight. Probably several generations completed annually, with adults most abundant during late summer in inland s. QLD, and in Feb and Mar in cc. NSW. **Habitat:** usually in or near subtropical rainforest in coastal areas; also eucalypt open-forest and woodland; suburban gardens where the larval food plants are established. **Status:** very common but local; less common on the tablelands. **Larval food plants:** flower buds and flowers of *Acacia*, *Macadamia integrifolia*, *Alectryon coriaceus*, *Cupaniopsis anacardioides*, *Harpullia pendula*, **Albizia lebbeck*, **Litchi chinensis*. **Larval attendant ants:** very occasionally *Dolichoderus*, *Crematogaster*.

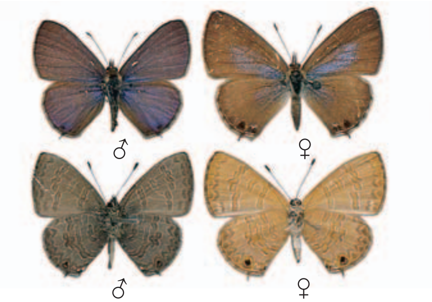
Purple Line-blue *Prosotas dubiosa*



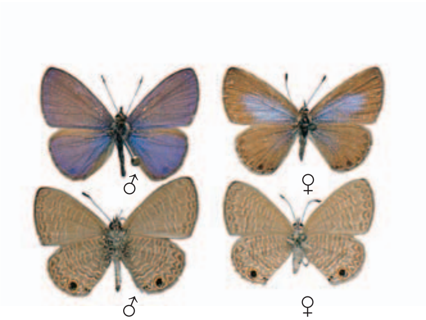
Other name: Small Purple Line-blue. **Wingspan:** ♂ 18 mm, ♀ 19 mm. **Similar species:** Short-tailed Line-blue, Long-tailed Line-blue, Two-spotted Line-blue, Mauve Line-blue. The Purple Line-blue lacks a tail on the HW compared to the Short-tailed and Long-tailed Line-blues. **Variation:** extent of blue central areas on upperside varies seasonally in females. **Behaviour:** adults are usually seen feeding from flowers of shrubs or small trees. Males often found on hilltops. Probably several generations completed annually. **Habitat:** savannah woodland; also suburban areas. **Status:** common but local. **Larval food plants:** flower buds and flowers of *Cajanus reticulatus*, *Dalbergia sissoo*, *Acacia*, *Archidendron grandiflorum*, *Macadamia integrifolia*, *Alectryon tomentosus*, *Harpullia pendula*, **Albizia lebbeck*, **Leucaena leucocephala* **Litchi chinensis*. **Larval attendant ant:** none.



Long-tailed Line-blue

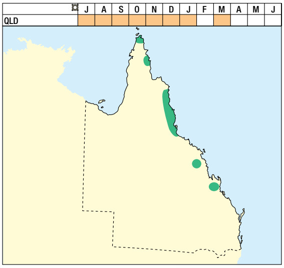


Short-tailed Line-blue



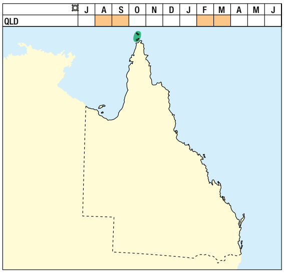
Purple Line-blue

Bronze Line-blue *Ionolyce helicon*



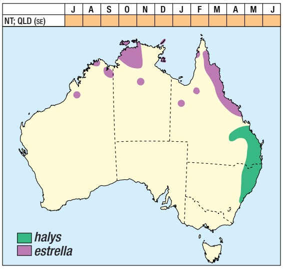
Other name: Helicon Line-blue. **Wingspan:** ♂ 19 mm, ♀ 20 mm. **Similar species:** Long-tailed Line-blue. The Bronze Line-blue has the FW termen straighter with the apex more sharply pointed. **Behaviour:** males have been observed to settle on dead twigs, 1–4 m or more above the ground, their flight somewhat similar to that of the Purple Line-blue. Number of generations completed annually not recorded; adults are abundant seasonally, particularly in the late dry season on Cape York Peninsula when most rainforest plants have finished flowering. **Habitat:** adults have been collected in tropical rainforest and monsoon forest (coastal vine thicket). **Status:** common but local. **Larval food plant:** not recorded. **Larval attendant ants:** not recorded.

Papuan Line-blue *Catopyrops ancyra*

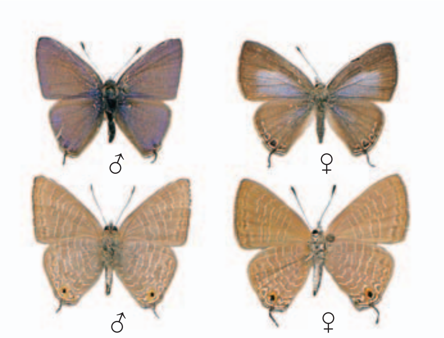


Wingspan: ♂ 22 mm, ♀ 24 mm. **Similar species:** Speckled Line-blue, Pale Pea-blue, Cobalt Pea-blue. The Papuan Line-blue has two short bands in the FW underside cell, the HW underside black subtornal spot smaller, and a shorter tail on the HW compared to the Pale and Cobalt pea-blues. **Variation:** extent of blue central areas on upperside varies seasonally in females. **Behaviour:** males perch on foliage, up to 2–3 m from the ground, along the margins of the forest to establish territories. Probably several generations completed annually. **Habitat:** rainforest edge, favouring gaps in natural clearings or along tracks. **Status:** common but restricted to the Torres Strait islands, QLD. **Larval food plants:** flowers of *Pipturus argenteus, Caesalpinia bonduc*. **Larval attendant ant:** occasionally *Crematogaster*.

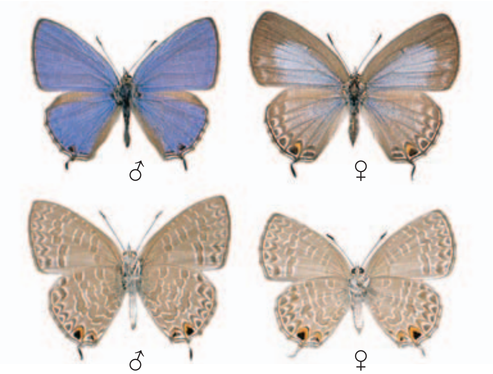
Speckled Line-blue *Catopyrops florinda*



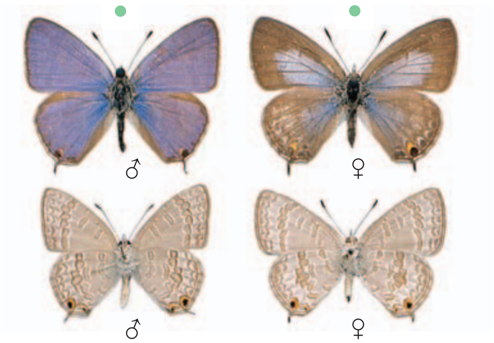
Wingspan: ♂ 22 mm, ♀ 22 mm. **Similar species:** Papuan Line-blue, Pale Pea-blue, Cobalt Pea-blue, Wattle Blue. The Speckled Line-blue has two short bands in the FW underside cell, the HW underside black subtornal spot smaller, and a shorter tail on the HW compared to the Pale and Cobalt pea-blues. It has the FW underside postmedian band curved inwards near the costa compared to the Wattle Blue. **Variation:** two subspecies; *C. f. halys* females vary seasonally in extent of blue on upperside. **Behaviour:** adults perch on leaves of trees or shrubs to bask in sunlight; they may feed from flowers. Probably several generations completed annually. **Habitat:** edges of rainforest and gallery forest, where the larval food plants grow. **Status:** common but local; less common south of the Manning River, NSW. **Larval food plants:** flowers, flower buds and young terminal leaves of *Caesalpinia bonduc, Harpullia pendula, Trema tomentosa, Pipturus argenteus*. **Larval attendant ants:** occasionally *Polyrhachis*, *Crematogaster*, **Technomyrmex*.



Bronze Line-blue

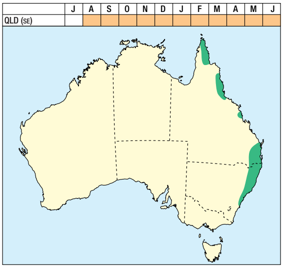


Papuan Line-blue



Speckled Line-blue

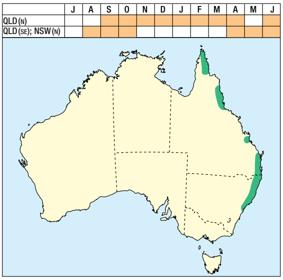
Hairy Line-blue *Erysichton lineata*



	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧

Wingspan: ♂ 21 mm, ♀ 21 mm. **Similar species:** Marbled Line-blue, Glistening Line-blue. Hairy Line-blue males have long whitish hairs on the upperside of both wings compared to Marbled Line-blue males. Females have the FW upperside white central patch larger, and the FW termen more rounded compared to Glistening Line-blue females. **Behaviour:** adults fly high amongst the foliage of trees and shrubs, occasionally descending closer to ground. Males often perch, several metres above the ground, on trees near the larval food plants. Females are usually observed fluttering around the food plants. Probably several generations completed annually; adults are very seasonal near Sydney, being abundant only in autumn. **Habitat:** edges of rainforest, including littoral rainforest and warm temperate rainforest, both on the coast and tablelands, where the larval food plants grow; also suburban gardens in Brisbane. **Status:** common but local. **Larval food plants:** flower buds and flowers of *Ehretia*, *Syzigium*, *Macadamia*, *Alectryon*, *Cupaniopsis*, *Elatostachys*, *Harpullia*, *Jagera*, *Miscarytera*, *Brachychiton*. **Larval attendant ants:** very occasionally *Polyrhachis pilosa.*

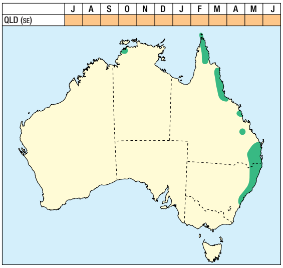
Marbled Line-blue *Erysichton palmyra*



	J	A	S	O	N	D	J	F	M	A	M	J
QLD (N)			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		🟧
QLD (SE); NSW (N)		🟧	🟧	🟧						🟧	🟧	🟧

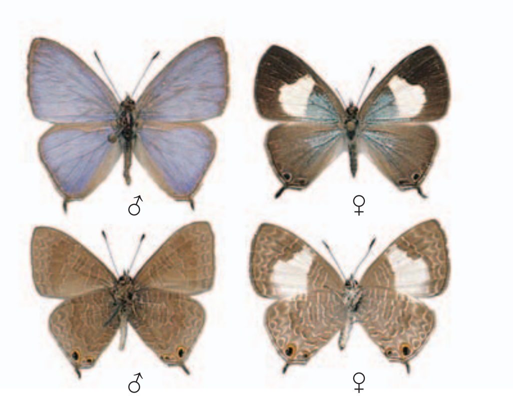
Wingspan: ♂ 22 mm, ♀ 22 mm. **Similar species:** Hairy Line-blue, Glistening Line-blue. The Marbled Line-blue has the scale-fringe distinctly chequered brown and white, a whitish subterminal area on the underside of both wings, and the underside markings richer and bolder. Females have the FW upperside white central patch larger, and the FW termen more rounded compared to Glistening Line-blue females. **Behaviour:** adults are inconspicuous on the wing; they drink from moist sand during hot weather. At least three generations annually in cc. NSW, with adults more abundant during winter; they are very seasonal in n. QLD depending on availability of larval food, usually more abundant during the wet season on the Atherton Tableland. **Habitat:** eucalypt open-forest, where the mistletoe food plants grow as parasitic shrubs on trees; occasionally rainforest. **Status:** common but local. **Larval food plants:** flowers of *Dendrophthoe vitellina* in coastal se. QLD and cc. NSW; also *Amyema congener* and occasionally *A. cambagei* in cc. NSW. **Larval attendant ant:** none.

Glistening Line-blue *Sahulana scintillata*

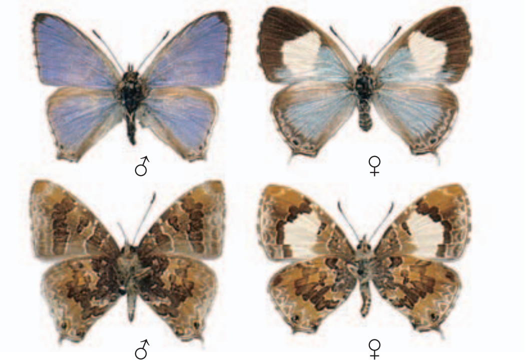


	J	A	S	O	N	D	J	F	M	A	M	J
QLD (SE)	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧

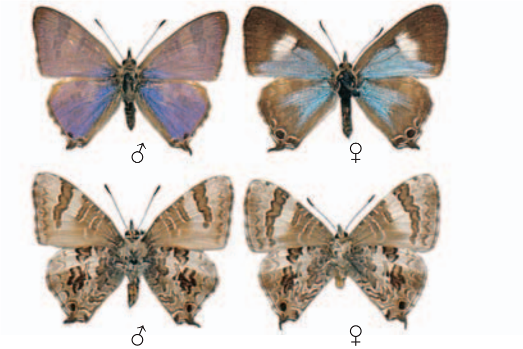
Wingspan: ♂ 19 mm, ♀ 19 mm. **Similar species:** Marbled Line-blue, Hairy Line-blue. Glistening Line-blue females have the FW upperside white central patch smaller, and the FW termen straighter. **Behaviour:** males establish territories on certain large trees during the late morning. Probably several generations completed annually, with adults abundant seasonally and locally depending on availability of larval food. Breeding appears to be continuous throughout the year, with adults switching their larval food plants seasonally. **Habitat:** usually coastal woodland and littoral rainforest, where the larval food plants grow; also suburban gardens. **Status:** common but local. **Larval food plants:** flower buds and flowers of *Alectryon coriaceus*, **Albizia lebbeck* in summer; *Acacia disparrima*, *A. leiocalyx*, *A. maidenii* in autumn; *Cupaniopsis anacardioides* in winter in se. QLD. **Larval attendant ant:** none.



Hairy Line-blue

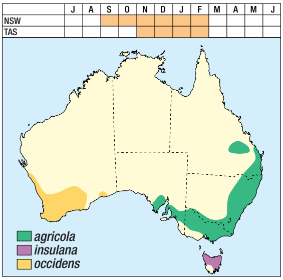


Marbled Line-blue



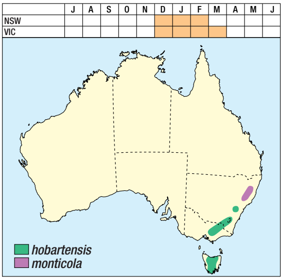
Glistening Line-blue

Fringed Heath-blue *Neolucia agricola*



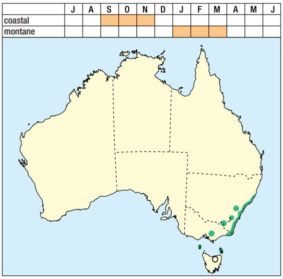
Wingspan: ♂ 20 mm, ♀ 21 mm. **Similar species:** Montane Heath-blue, Dull Heath-blue, Purple Copper. The Fringed Heath-blue has two distinct, sharply pointed black inverted V-shaped subterminal marks on the HW underside. **Variation:** three subspecies. **Behaviour:** adults fly rapidly close to the ground. Males readily hilltop. One generation annually, with adults flying for only a few weeks in spring in the coastal areas of s. QLD, c. NSW and Canberra, or in summer on the tablelands and mountains of s. NSW, ACT and VIC. **Habitat:** heathland, coastal, subcoastal and subalpine eucalypt woodland with a heath understorey on the coast, tablelands and ranges of and near the Great Dividing Range on the mainland, from sea level up to 1065 m in TAS and 1700 m in ACT, where the larval food plants grow abundantly in the understorey; also semi-arid deserts. **Status:** common but local. **Larval food plants:** flower buds and flowers of *Aotus ericoides, Bossiaea, Daviesia, Dillwynia, Eutaxia microphylla, Jacksonia sternbergiana, Pultenaea*. **Larval attendant ant:** very occasionally *Iridomyrmex*.

Montane Heath-blue *Neolucia hobartensis*

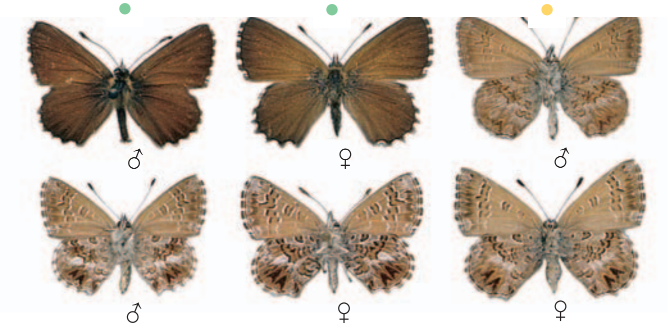


Other names: Mountain Blue, Barrington Blue. **Wingspan:** ♂ 16 mm, ♀ 16 mm. **Similar species:** Fringed Heath-blue, Dull Heath-blue. The Montane Heath-blue has the FW underside postmedian band usually broken into a series of obscure spots. **Variation:** two subspecies; *N. h. hobartensis* varies geographically in extent of whitish patch on HW underside. **Behaviour:** adults fly close to the ground in the breeding areas. Males patrol around the outer foliage of the larval food plant. One generation annually, with adults usually flying from Dec or Jan to Feb. **Habitat:** subalpine eucalypt open-woodland and alpine heathland, from 300 to 1370 m in TAS, above 800 m in VIC, 1000–2190 m in s. NSW, above 1200 m in n. NSW, preferring edges of swamps and boggy creeks where the larval food plants grow as low shrubs in acidic soils. **Status:** common but very local. **Larval food plants:** flower buds and flowers of *Epacris breviflora, E. petrophila* in ACT; *E. petrophila, E. paludosa* in VIC. **Larval attendant ant:** none.

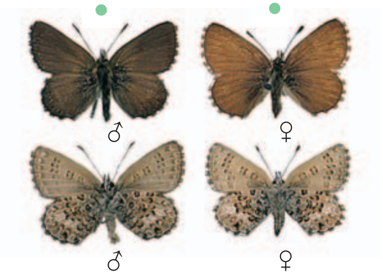
Dull Heath-blue *Neolucia mathewi*



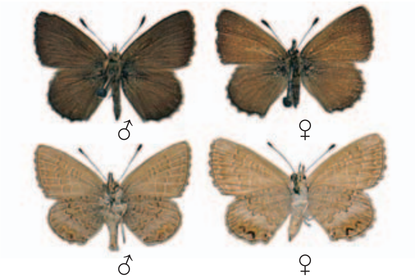
Other names: Mathew's Blue, Broom Heath-blue. **Wingspan:** ♂ 18 mm, ♀ 17 mm. **Similar species:** Fringed Heath-blue, Montane Heath-blue. The Dull Heath-blue has the HW underside markings obscure. **Behaviour:** adults fly during sunshine, or during warm overcast conditions, in the understorey of the breeding areas; they may feed from flowers such as eucalypts or settle on the ground or low foliage to bask, with wings half opened. Males are usually observed patrolling rapidly around the terminal foliage and flowers of the larval food plant. One generation annually, with adults flying for only a few weeks in spring in coastal areas or from late Jan to early Mar in montane areas. **Habitat:** heathland and banksia woodland in coastal areas, where the larval food plant grows as a tall shrub or small tree on sand close to the shore-line; subalpine heathland or shrubland at the fringes of eucalypt woodland on granite rocky outcrops in montane areas. **Status:** very common but very local. **Larval food plants:** flower buds of *Monotoca elliptica* in coastal NSW; *M. oreophila* at Mount Baw Baw, VIC. **Larval attendant ant:** none.



Fringed Heath-blue

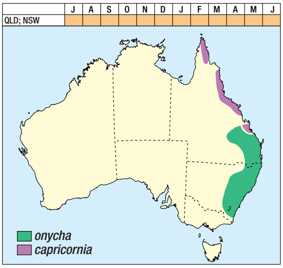


Montane Heath-blue



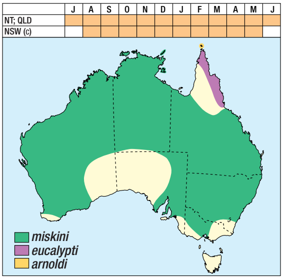
Dull Heath-blue

Cycad Blue *Theclinesthes onycha*

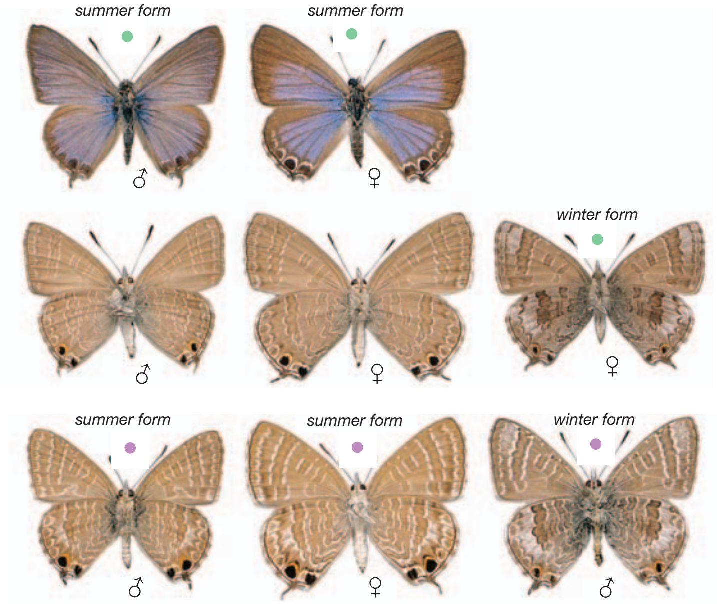


Other name: Onycha Blue. **Wingspan:** ♂ 24 mm, ♀ 24 mm. **Similar species:** Wattle Blue, Bitter-bush Blue, Western Bitter-bush Blue. The Cycad Blue is larger, and has the underside ground colour brown, rather than greyish, compared to the Wattle Blue; males have more brown-black subterminal spots on the HW upperside. It has the tail on the HW longer and more slender, and more prominent subtornal spots on the HW underside than in the Bitter-bush and Western Bitter-bush Blues. **Variation:** two subspecies, both have two seasonal forms with intermediate forms. **Behaviour:** adults fly rapidly around or settle on the larval food plant, or rest on the ground nearby. Males frequently hilltop throughout the day and perch about 1–3 m above the ground on understorey shrubs to establish territories. Females usually found on or near the food plant. Several generations annually. Breeding appears to be continuous throughout the year, but adults are more abundant after bushfire when the immature stages can be found commonly on the young seedlings or new regenerating leaves of the food plants. **Habitat:** coastal and subcoastal eucalypt open-forest and tall open-forest with an open grassy ground cover, where the larval food plants grow in the understorey. **Status:** common but local; less common on the tablelands and western slopes of the Great Dividing Range. **Larval food plants:** young soft fronds of *Cycas* in coastal ne. and c. QLD, *Macrozamia* in inland QLD, coastal s. QLD and NSW. **Larval attendant ants:** occasionally *Iridomyrmex*, *Ochetellus*, *Calomyrmex*, *Camponotus*, *Notoncus*, *Paratrechina*, *Polyrhachis*.

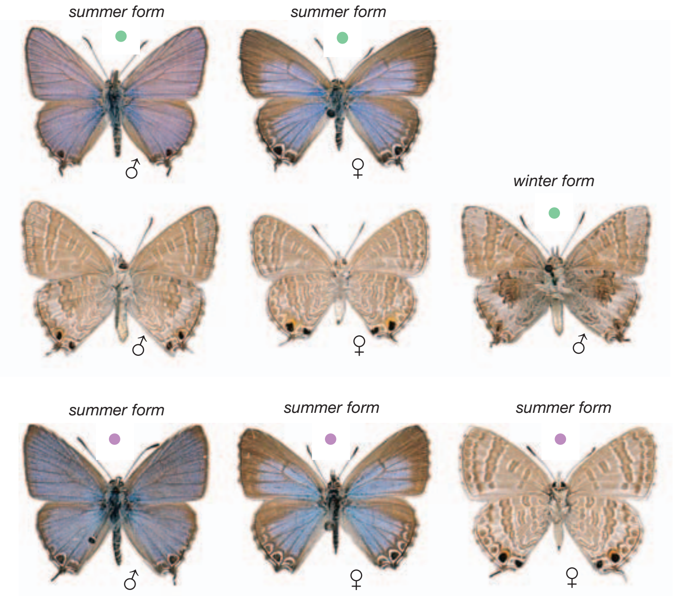
Wattle Blue *Theclinesthes miskini*



Other name: Miskin's Blue. **Wingspan:** ♂ 22 mm, ♀ 22 mm. **Similar species:** Cycad Blue, Bitter-bush Blue, Western Bitter-bush Blue, Speckled Line-blue. The Wattle Blue is smaller, and has the underside ground colour greyish, rather than brown, compared to the Cycad Blue; males have fewer brown-black subterminal spots on the HW upperside. It has the tail on the HW longer and more slender, and more prominent subtornal spots on the HW underside than in the Bitter-bush and Western Bitter-bush Blues. It has the HW tornus more rounded, and the FW underside postmedian band relatively straight near the costa compared to the Speckled Line-blue. **Variation:** three subspecies; those on the mainland have two seasonal forms with intermediate forms. **Behaviour:** adults fly rapidly around the larval food plant. Males commonly congregate on hilltops where they perch on tall shrubs and trees, usually 3 m above the ground to establish territories. Several generations annually. **Habitat:** savannah woodland, eucalypt woodland and open-forest with an open grassy understorey, where very small plants, such as seedlings or new growth from suckers, of the larval food plants grow; also semi-arid and arid shrubland; sometimes edges of gallery forest. **Status:** common but local; less common in cs. VIC. **Larval food plants:** usually *Acacia*; also *Cajanus, Cathormion umbellatum, Sesbania, Paraserianthes lophantha, Corymbia, Eucalyptus, Atalaya* in n. Australia. **Larval attendant ants:** occasionally *Dolichoderus, Froggattella, Iridomyrmex, Camponotus, Paratrechina*.



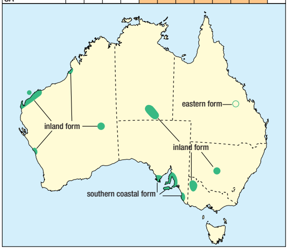
Cycad Blue



Wattle Blue

Bitter-bush Blue *Theclinesthes albocincta*

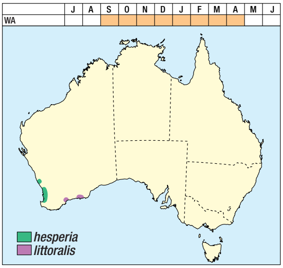
	J	A	S	O	N	D	J	F	M	A	M	J
VIC		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	
SA					🟧	🟧	🟧	🟧	🟧	🟧	🟧	



Wingspan: ♂ 22 mm, ♀ 21 mm. **Similar species:** Western Bitter-bush Blue, Wattle Blue, Cycad Blue. The Bitter-bush Blue has the FW narrower, the FW underside postmedian band curved, the scale-fringe chequered brown and white, the HW tail tipped with white, and the underside markings often more conspicuously edged with white compared to the Western Bitter-bush Blue. 'Southern coastal forms' have the HW upperside subterminal spots more distinct; males have the upperside colour brighter and greyish-blue, rather than darker blue-lilac. It has the tail shorter and broader, and the HW underside subtornal spots less prominent compared to the Wattle and Cycad Blues. **Variation:** three geographical forms; 'inland' and 'southern coastal forms' vary seasonally. **Behaviour:** adults fly rapidly within 2 m of the ground, usually near the larval food plant or around nearby shrubs upon which they settle; they readily feed from flowers. Males hilltop on sand dunes or sand ridges. Several overlapping generations annually in nw. VIC and coastal SA. **Habitat:** sand dunes near salt-lakes, and the ecotone between flood plain woodland and mallee shrubland in inland areas, preferring open areas where the larval food plants grow as shrubs up to 3 m in dense patches on sandy soils; sand dunes near the seashore in coastal SA, where the food plant grows. **Status:** common but very local; lower risk in nw. VIC and near Adelaide. **Larval food plants:** *Adriana tomentosa* in inland areas; *A. quadripartita* in coastal s. SA. **Larval attendant ants:** occasionally *Dolichoderus*, *Iridomyrmex*, *Ochetellus*, *Camponotus*, *Melophorus*, *Notoncus*, *Polyrhachis*, *Myrmecia*, *Crematogaster*, *Monomorium*, *Rhytidoponera*.

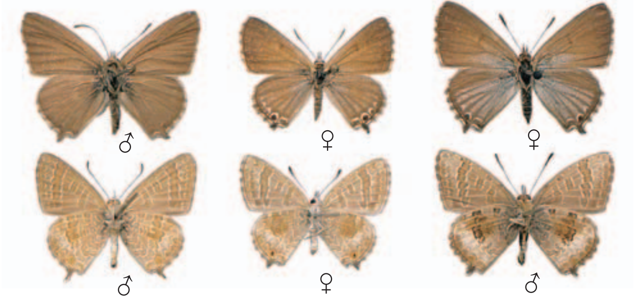
Western Bitter-bush Blue *Theclinesthes hesperia*

	J	A	S	O	N	D	J	F	M	A	M	J
WA			🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧		

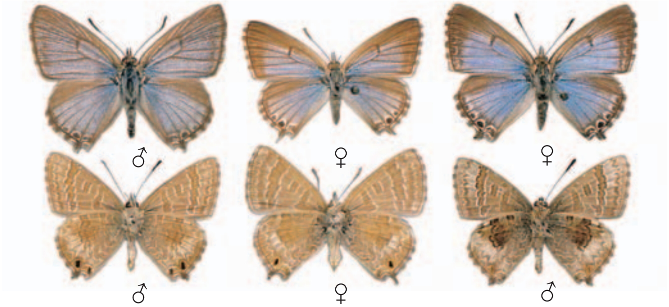


Other name: Western Blue. **Wingspan:** ♂ 22 mm, ♀ 22 mm. **Similar species:** Bitter-bush Blue, Wattle Blue, Cycad Blue. The Western Bitter-bush Blue has the FW broader, the FW underside postmedian band straighter, and the underside markings often narrowerly edged with white compared to the Bitter-bush Blue. It has the tail shorter and broader, and the HW underside subtornal spots less prominent compared to the Wattle and Cycad Blues. **Variation:** two subspecies. **Behaviour:** males hilltop on sand dunes. Several overlapping generations annually. **Habitat:** coastal sand dunes, where the larval food plant grows near the seashore. **Status:** common but local; threatened. **Larval food plant:** *Adriana quadripartita*. **Larval attendant ants:** occasionally *Iridomyrmex conifer, Camponotus evae, Crematogaster*.

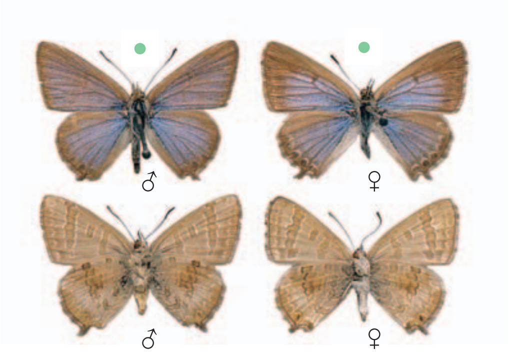
summer inland form *winter inland form*



summer southern coastal form *winter southern coastal form*



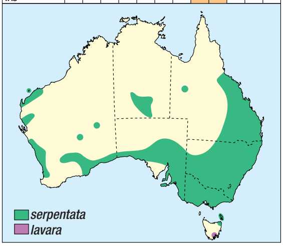
Bitter-bush Blue



Western Bitter-bush Blue

Saltbush Blue *Theclinesthes serpentata*

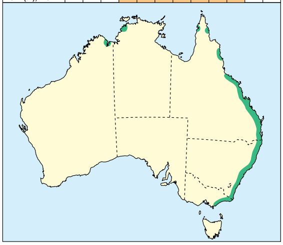
	J	A	S	O	N	D	J	F	M	A	M	J
VIC; SA		🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	
TAS								🟧	🟧			



Other name: Chequered Blue. **Wingspan:** ♂ 18 mm, ♀ 18 mm. **Similar species:** Samphire Blue. The Saltbush Blue has the upperside blue basal areas more extensive, and patches of white suffusion on the underside. **Variation:** two subspecies; *T. s. serpentata* females vary in the extent of blue on the upperside. **Behaviour:** adults fly rapidly within 1–2 m of the ground, usually around the larval food plants; they frequently settle on low shrubs and the food plant, with wings closed and slowly moving the HWs alternately up and down. Males hilltop, flying low to the ground over rocks or bare ground near the summit. Probably several generations completed annually. **Habitat:** wide variety of habitats, including saline mud-flats and sand dunes in coastal areas, saltbush open-shrubland on slightly alkaline soils in the inland plains; also woodland, open-woodland and suburban gardens, prefers open areas where the larval food plants grow in abundance in the ground layer. **Status:** very common but local. **Larval food plants:** usually *Atriplex, Einadia, Rhagodia*, *Chenopodium*; also **Chenopodium album*; *Atalaya hemiglauca* in inland c. QLD. **Larval attendant ants:** occasionally *Iridomyrmex*, *Camponotus, Notoncus*, *Myrmecia*, *Monomorium*.

Samphire Blue *Theclinesthes sulpitius*

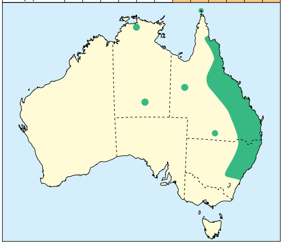
	J	A	S	O	N	D	J	F	M	A	M	J
QLD	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
NSW (SE); VIC				🟧	🟧	🟧	🟧	🟧	🟧	🟧		



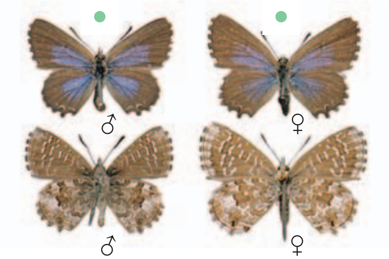
Other name: Saltpan Blue. **Wingspan:** ♂ 18 mm, ♀ 18 mm. **Similar species:** Saltbush Blue. The Samphire Blue has the HW underside subtornal spot more pronounced. **Variation:** populations from NT and n. QLD have the underside ground colour richer, with more distinct markings, and the scale-fringe chequered brown and white. **Behaviour:** adults fly close to the ground, usually around the larval food plant upon which they frequently settle; when settled they perch head downwards with wings closed, slowly moving the HWs alternately up and down. Probably several generations completed annually. **Habitat:** coastal estuarine mud-flats and salt-marshes in the intertidal zone of rivers and creeks, where the samphire food plants grow below the high-tide mark and are periodically inundated with saline water. **Status:** common but local. **Larval food plants:** *Halosarcia indica, Sarcocornia quinqueflora, Suaeda australis, Tecticornia australasica*. **Larval attendant ant:** occasionally small black ants.

Plumbago Blue *Leptotes plinius*

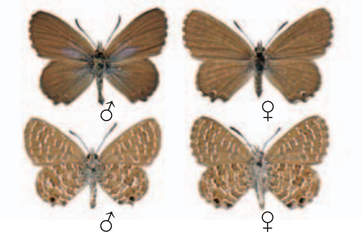
	J	A	S	O	N	D	J	F	M	A	M	J
QLD	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧	🟧
NSW (CC)							🟧	🟧	🟧	🟧	🟧	🟧



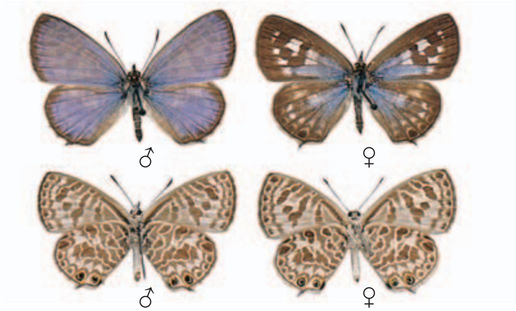
Other name: Zebra Blue. **Wingspan:** ♂ 22 mm, ♀ 23 mm. **Similar species:** none. The Plumbago Blue has the underside pattern marbled with brown and white. **Behaviour:** adults fly within a few metres of the ground, typically around the foliage and flowers of the larval food plant. Several generations annually, with adults more seasonal at Sydney where they fly mainly from late summer to early winter when larval food is available. **Habitat:** open-woodland and savannah woodland, where the native larval food plant grows as a scrambling shrub less than 1 m; also suburban areas on the eastern coast, where the introduced food plant is commonly grown as an ornamental shrub or hedge. **Status:** common but local. **Larval food plants:** flower buds and flowers of *Plumbago zeylanica* in QLD; **Plumbago auriculata* in suburban coastal areas. **Larval attendant ants:** very occasionally *Iridomyrmex, Paratrechina*.



Saltbush Blue

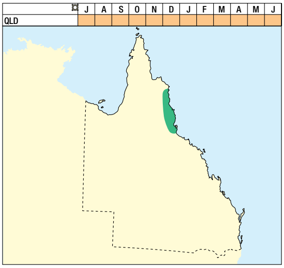


Samphire Blue



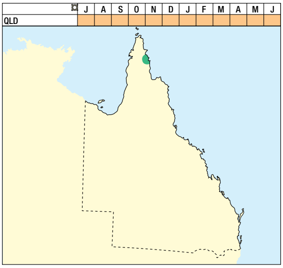
Plumbago Blue

White-banded Cerulean *Jamides aleuas*



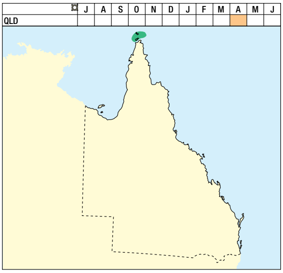
Other name: Bright Cerulean. **Wingspan:** ♂ 28 mm, ♀ 28 mm. **Similar species:** Pale Cerulean, Large Green-banded Blue. White-banded Cerulean females have black and white markings on the underside compared to Pale Cerulean females. Males are smaller, have the upperside black termen narrower, the underside iridescent green bands narrower and reduced, and a tail on the HW compared to Large Green-banded Blue males. **Behaviour:** adults fly slowly along the edges of creeks or tracks through the forest, and frequently settle, within a few metres of the ground, on the leaves, twigs and flowers of vines in the filtered sunlight; during the late afternoon they settle together on bushes to roost for the night. Probably several generations completed annually; adults are abundant seasonally. **Habitat:** tropical rainforest in wet coastal areas, preferring small open areas where juvenile trees, usually less than 2 m high, of the larval food plants grow. **Status:** common but local and restricted to the Wet Tropics, QLD. **Larval food plants:** new soft leaves of young plants of *Arytera pauciflora, Sarcopteryx stipata*. **Larval attendant ant:** occasionally *Crematogaster*.

Pale Cerulean *Jamides cyta*

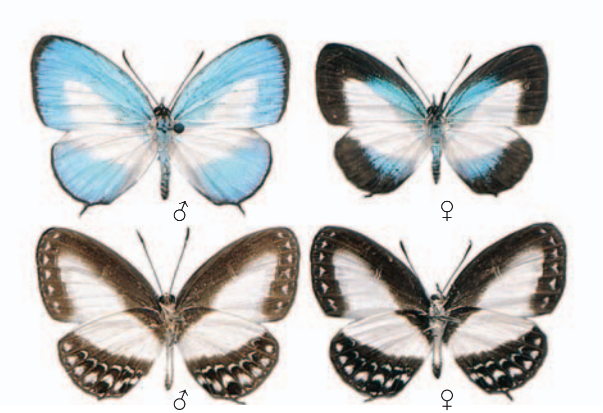


Wingspan: ♂ 29 mm, ♀ 29 mm. **Similar species:** White-banded Cerulean. Pale Cerulean females have brown and white markings on the underside. **Behaviour:** adults fly slowly amongst trees in the understorey. Probably several generations completed annually, with adults most abundant during summer when the larval food plant flowers. **Habitat:** tropical rainforest, where the larval food plant grows as a small tree along watercourses. **Status:** common but local and restricted to Iron Range on Cape York Peninsula, QLD. **Larval food plant:** flower buds, flowers and fruits of *Syzygium puberulum*; possibly *S. tierneyanum*. **Larval attendant ants:** occasionally *Philidris cordatus*, *Camponotus*.

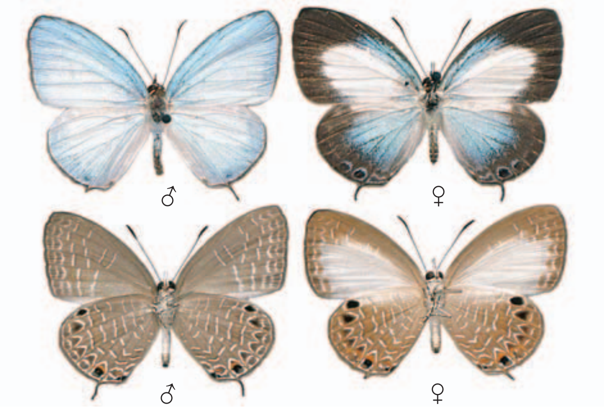
Shining Cerulean *Jamides amarauge*



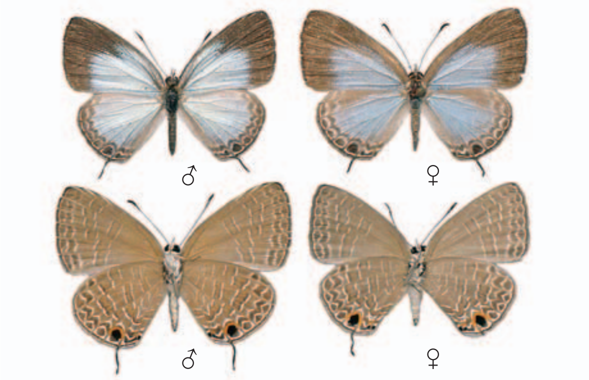
Other name: Amarauge Cerulean. **Wingspan:** ♂ 25 mm, ♀ 25 mm. **Similar species:** none. The Shining Cerulean has the upperside colour very pale blue, and the FW margins broadly dark brown-black. **Behaviour:** males fly rapidly and patrol high over the forest canopy or around prominent trees heavily laden with vines or figs along the forest margins during the afternoon, occasionally descending lower down in open sunny glades for a few moments before quickly returning; they may also feed from flowers in the same sunlit patches. Number of generations completed annually not recorded. **Habitat:** adults have been collected along the edges of lowland tropical rainforest. **Status:** common but local and restricted to the Torres Strait islands. **Larval food plant:** not recorded. Possibly flowers of *Pueraria lobata*. **Larval attendant ant:** not recorded.



White-banded Cerulean

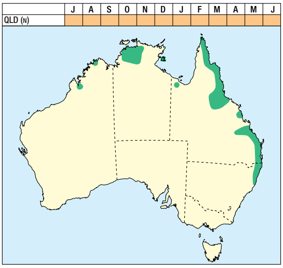


Pale Cerulean



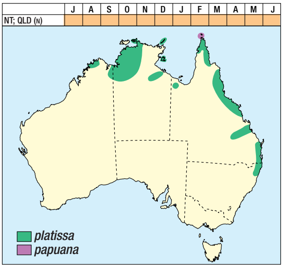
Shining Cerulean

Purple Cerulean *Jamides phaseli*



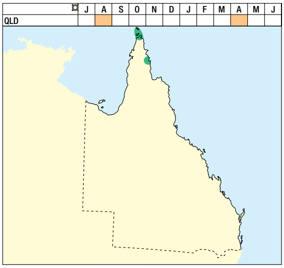
Other name: Dark Cerulean. **Wingspan:** ♂ 23 mm, ♀ 23 mm. **Similar species:** Large Purple Line-blue. The Purple Cerulean has the FW termen straighter, and lacks markings in the submedian area and cell on the FW underside. **Variation:** extent of bluish-purple area on upperside varies seasonally in females, especially in southern areas of range. **Behaviour:** males establish territories by patrolling close to the ground in the breeding habitat in coastal areas of ne. QLD. Females are usually observed flying with a slower, more fluttery flight, often around flowers of the larval food plant. Probably several generations completed annually. **Habitat:** eucalypt open-forest and coastal sand dunes, where the larval food plants grow in the understorey. **Status:** common and widespread. **Larval food plants:** flower buds and flowers of *Cajanus reticulatus, Canavalia rosea, Indigofera pratensis, Pongamia pinnata, Tephrosia rufula, *Phaseolus vulgaris*. **Larval attendant ant:** occasionally small black or brown ants.

Pale Pea-blue *Catochrysops panormus*

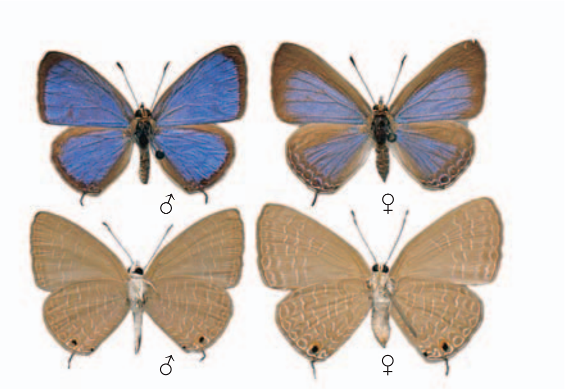


Other name: Forget-me-not. **Wingspan:** ♂ 23 mm, ♀ 23 mm. **Similar species:** Cobalt Pea-blue, Speckled Line-blue, Papuan Line-blue, Spotted Pea-blue. Pale Pea-blue females have the HW tail longer, and the HW termen less rounded than in Spotted Pea-blue females; males have the upperside colour pale grey-blue, rather than pale lilac, and the FW apex more pointed. **Variation:** two subspecies; *C. p. platissa* females vary seasonally in extent and colour of blue area on upperside. **Behaviour:** adults have a fairly rapid and erratic flight. Probably several generations completed annually. **Habitat:** eucalypt open-forest and savannah woodland, where the larval food plants grow as small shrubs in the grassy understorey. **Status:** common and widespread; less common south of Brisbane. **Larval food plants:** flower buds and flowers of *Cajanus reticulatus, Crotalaria alata, Dendrolobium umbellatum, Flemingia lineata*; possibly *Galactia tenuiflora, Cajanus confertiflorus, C. acutifolius*. **Larval attendant ant:** occasionally small black ants.

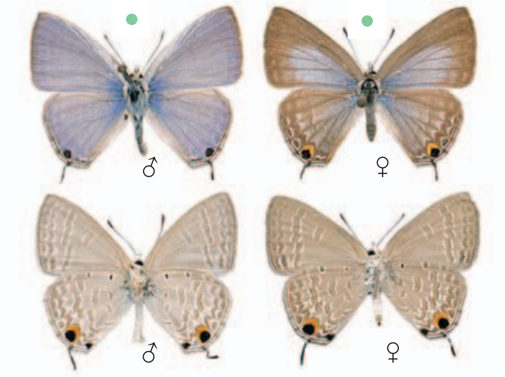
Cobalt Pea-blue *Catochrysops amasea*



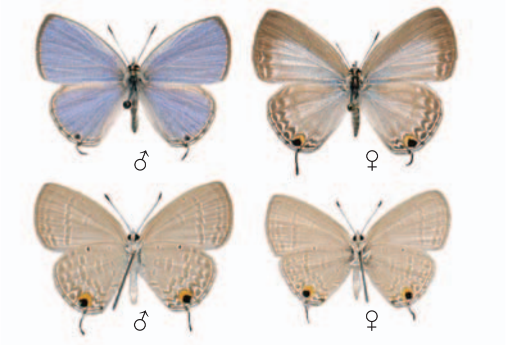
Other name: Amasea Blue. **Wingspan:** ♂ 21 mm, ♀ 21 mm. **Similar species:** Pale Pea-blue, Speckled Line-blue, Papuan Line-blue. The Cobalt Pea-blue is smaller, and has the FW termen and apex more rounded than in the Pale Pea-blue. It has a single short band in the FW underside cell, the HW tail longer and slender, the HW underside black subtornal spot larger, and two small pale brown subcostal spots on the HW underside compared to the Speckled and Papuan Line-blues. **Behaviour:** not recorded. **Habitat:** not recorded. **Status:** uncommon and restricted to the Torres Strait islands and Cape York Peninsula, at Cape York and Iron Range, QLD; rare on the mainland. **Larval food plant:** flower buds and flowers of *Desmodium heterocarpon*. **Larval attendant ant:** not recorded.



Purple Cerulean

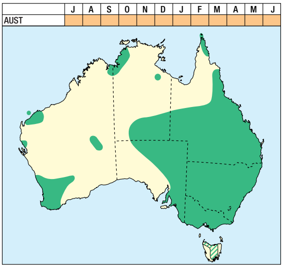


Pale Pea-blue



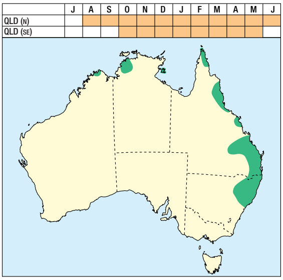
Cobalt Pea-blue

Long-tailed Pea-blue *Lampides boeticus*



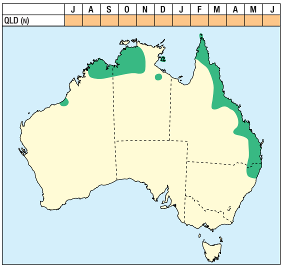
Other names: Pea Blue, Tailed Blue, Long-tailed Blue. **Wingspan:** ♂ 25 mm, ♀ 27 mm. **Similar species:** none. The Long-tailed Pea-blue has a broad white subterminal band on the HW underside. **Behaviour:** adults have a rapid jerky flight; they fly near the larval food plants, and readily feed from flowers; when settled they slowly move the HWs alternately up and down. Males flutter slowly at the base of the larval food plants near the ground in the early morning, searching for newly emerged females; they are also found flying in wide open grassy areas on hilltops. Several generations annually. Adults migratory. **Habitat:** wide variety of habitats; also suburban gardens where the larval food plants are commonly cultivated. **Status:** common and widespread; less common in the Top End, NT, and TAS. **Larval food plants:** flower buds and flowers of native and introduced legumes in the Fabaceae. **Larval attendant ants:** occasionally *Froggattella*, *Iridomyrmex*, *Camponotus*.

Orange-tipped Pea-blue *Everes lacturnus*

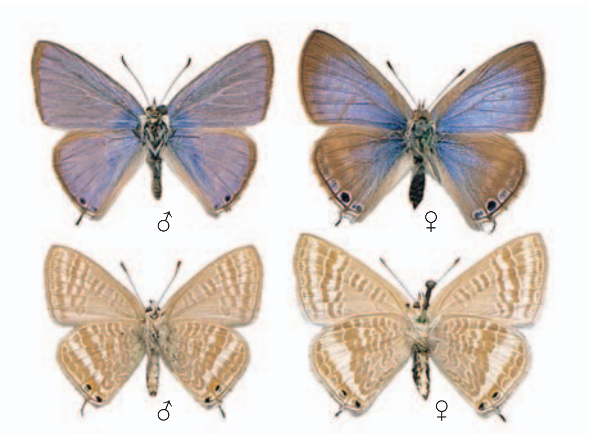


Other names: Tailed Grass-blue, Tailed Cupid. **Wingspan:** ♂ 23 mm, ♀ 22 mm. **Similar species:** none. The Orange-tipped Pea-blue has a prominent orange subterminal patch, enclosing two black spots, on the HW underside. **Behaviour:** adults fly slowly close to the ground in grassy places, often congregating in areas where patches of the larval food plant occur. Probably several generations completed annually; adults appear to be seasonal, being more abundant during summer and autumn when the food plant flowers. **Habitat:** eucalypt open-forest, preferring open grassy areas where the larval food plant grows as a herb. **Status:** common but local; less common south of Port Macquarie, NSW. **Larval food plant:** flowers and seedpods of *Desmodium heterocarpon* in coastal areas of QLD. **Larval attendant ant:** occasionally a few ants.

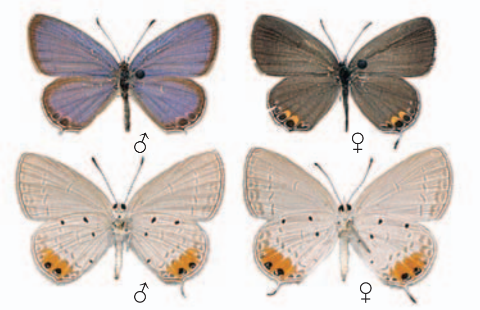
Spotted Pea-blue *Euchrysops cnejus*



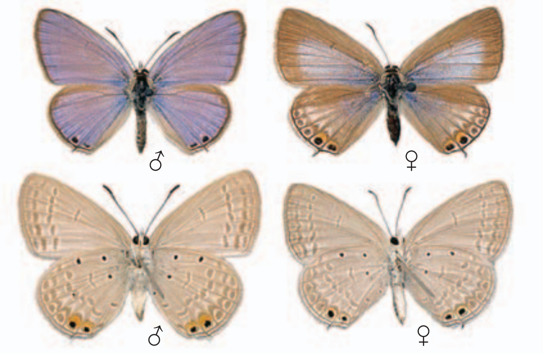
Other names: Five-spotted Pea-blue, Cupid. **Wingspan:** ♂ 27 mm, ♀ 26 mm. **Similar species:** Pale Pea-blue. Spotted Pea-blue females have the HW tail shorter, the HW termen more rounded, three black spots in the basal half of the HW underside, and the eyes smooth; males have the upperside colour pale lilac, rather than pale grey-blue, and the FW apex more rounded. **Behaviour:** adults fly rapidly. Females are often observed near the larval food plant, flying close to or settling upon the leaves, or laying eggs. Probably several generations completed annually. **Habitat:** savannah woodland, where the larval food plants grow as trailing legumes, often over rocks and low bushes. **Status:** common and widespread. **Larval food plants:** flower buds, flowers and seedpods of *Cajanus reticulatus, Sesbania, Vigna luteola, V. vexillate, *Cajanus cajan, *Macroptilium atropurpureum, *M. lathyroides, *Phaseolus vulgaris, *Vigna unguiculata*. **Larval attendant ants:** occasionally *Iridomyrmex*, *Camponotus*, *Opisthopsis*, *Polyrhachis*, *Pheidole*.



Long-tailed Pea-blue

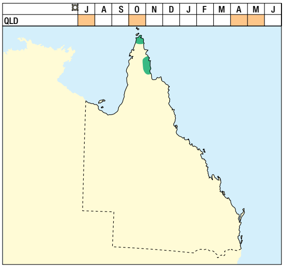


Orange-tipped Pea-blue



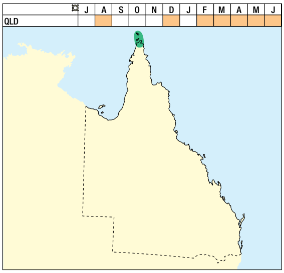
Spotted Pea-blue

Pied Blue *Pithecops dionisius*



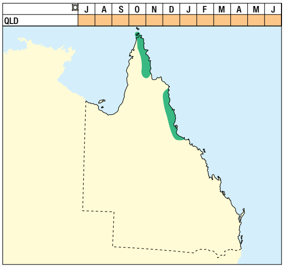
Wingspan: ♂ 29 mm, ♀ 26 mm. **Similar species:** Devil's Blue. The Pied Blue is larger, has the upperside white patches larger, and a black subbasal spot on the HW underside. **Behaviour:** adults have a slow and weak flight, close to the ground along edges of the forest. Number of generations completed annually not recorded; adult abundance appears to vary seasonally, being higher in May. **Habitat:** adults have been collected in tropical rainforest. **Status:** uncommon, local and restricted to Cape York Peninsula, from Lockerbie to the Rocky River, QLD. **Larval food plant:** not recorded. Possibly flowers and seedpods of *Desmodium ormocarpoides*. **Larval attendant ant:** not recorded.

Devil's Blue *Neopithecops lucifer*

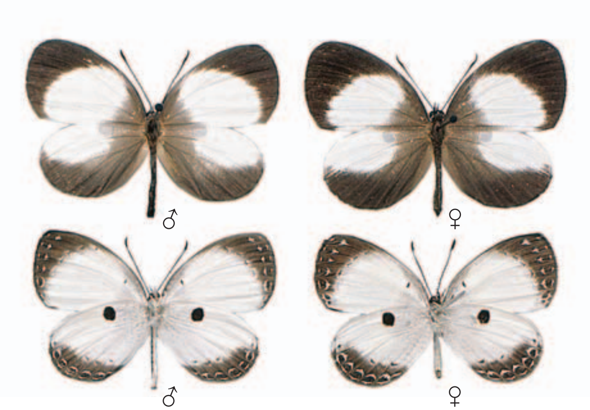


Other name: Quaker. **Wingspan:** ♂ 19 mm, ♀ 21 mm. **Similar species:** Pied Blue. The Devil's Blue is smaller, has the FW upperside white patch smaller, and a black apical spot on the HW underside. **Behaviour:** adults fly in the dark shade within the forest. Number of generations completed annually not recorded. **Habitat:** tropical rainforest, where the larval food plant grows in the dark shade of the understorey. **Status:** uncommon and restricted to the Torres Strait islands and Cape York, QLD. **Larval food plant:** young leaves of *Glycosmis trifoliata*. **Larval attendant ant:** not recorded.

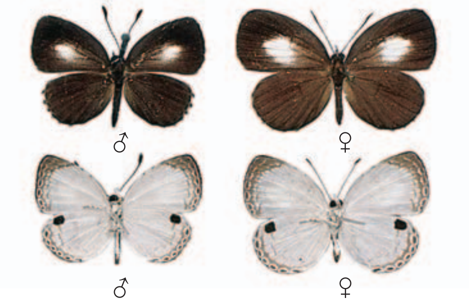
Small Pied Blue *Megisba strongyle*



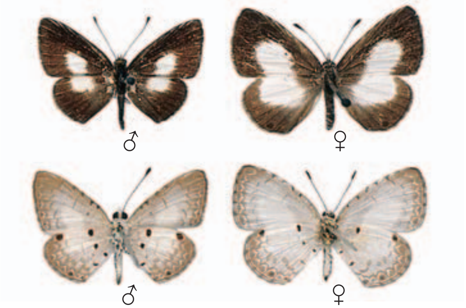
Other name: Malayan. **Wingspan:** ♂ 18 mm, ♀ 18 mm. **Similar species:** none. The Small Pied Blue has the upperside colour black with white central patches, and the FW apex sharply pointed. **Behaviour:** adults have a slow, fluttering flight; they are often found flying around or perched in the upper branches of flowering rainforest trees, including the larval food plants. Males may also fly higher up in the canopy along the edge of the forest. Number of generations completed annually not recorded. **Habitat:** edges of rainforest and gallery forest in both upland and lowland areas, where the larval food plants grow; also drier monsoon forests (vine thicket). **Status:** uncommon and local. **Larval food plants:** flower buds of *Macaranga inamoena, Mallotus paniculatus, Mallotus philippensis, Allophyllus cobbe*. **Larval attendant ant:** none.



Pied Blue

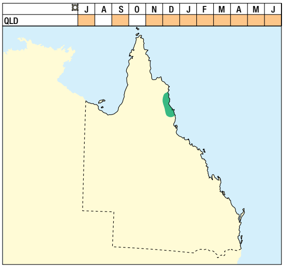


Devil’s Blue



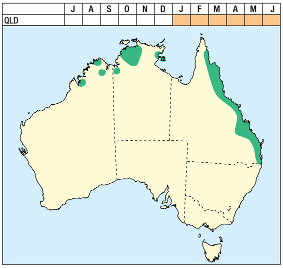
Small Pied blue

Delicate Blue *Udara tenella*



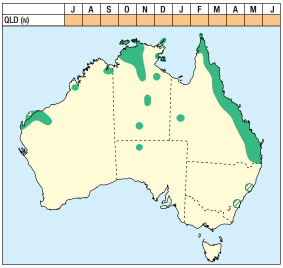
Other name: Australian Hedge Blue. **Wingspan:** ♂ 23 mm, ♀ 21 mm. **Similar species:** none. The Delicate Blue has the underside ground colour white with a series of dark brown spots, and a series of whitish subterminal rings on the HW upperside. **Behaviour:** adults fly high in the forest and are usually found on ridges or along pathways in the forest; they feed from flowers, including *Syzygium* and *Neolitsea*. Males have been observed visiting hilltops above 900 m. Number of generations completed annually not recorded; adults are apparently more abundant in winter. **Habitat:** adults have been collected in upland rainforest. **Status:** generally uncommon and restricted to the Wet Tropics, from Mt Misery to the Atherton Tableland, QLD. **Larval food plant:** not recorded. **Larval attendant ants:** not recorded.

Jewelled Grass-blue *Freyeria putli*

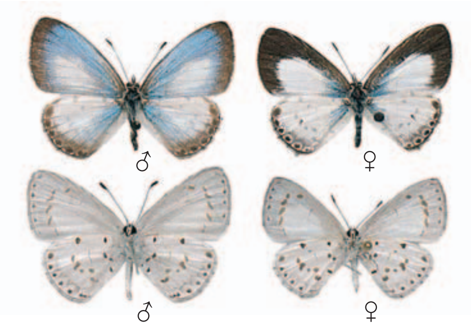


Other name: Grass Jewel. **Wingspan:** ♂ 14 mm, ♀ 15 mm. **Similar species:** none. The Jewelled Grass-blue has a row of black subterminal spots on the HW underside. **Behaviour:** adults fly slowly close to the ground in open grassy areas. Probably several generations completed annually; adults are very seasonal, flying only during, and soon after, the wet season when larval food is available. During the dry season the food plants dry out and die, and do not germinate until the following rains. **Habitat:** savannah woodland and grassy open-woodland in QLD, preferring disturbed areas amongst gravel and rocks or in sandy creek beds where the larval food plants grow as herbaceous annual legumes. **Status:** common but local. **Larval food plants:** flowers and leaves of *Flemingia lineata* in NT; *Indigofera colutea, I. hirsuta* in QLD. **Larval attendant ants:** occasionally *Iridomyrmex*, *Ochetellus*, *Polyrhachis*.

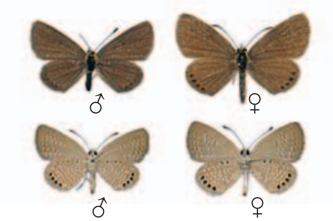
Black-spotted Grass-blue *Famegana alsulus*



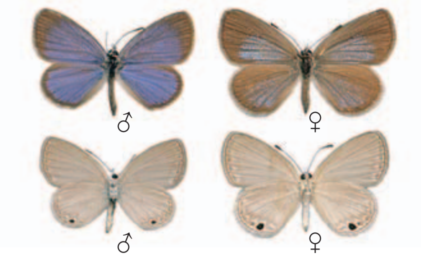
Wingspan: ♂ 17 mm, ♀ 17 mm. **Similar species:** Spotted Grass-blue, Common Grass-blue, Dainty Grass-blue. The Black-spotted Grass-blue has the underside ground colour uniformly pale grey, with a black spot on the HW underside. **Variation:** extent and colour of pale blue basal and central areas on the upperside in females, and the underside ground colour and markings in both sexes, vary seasonally in w. QLD. **Behaviour:** adults have a rather slow and weak flight close to the ground amongst herbs and grasses. Probably several generations completed annually, with adults more abundant during late summer and autumn following the wet season rains. **Habitat:** eucalypt open-forest, savannah woodland and open-woodland, where the larval food plants grow as small shrubs or as low-spreading creepers in the grassy understorey. **Status:** generally common and widespread. **Larval food plants:** flower buds and flowers of *Cajanus pubescens* in c. WA; *C. acutifolius* in w. QLD; *Indigofera pratensis* in coastal QLD; possibly *Galactia tenuiflora*, *Vigna lanceolata* in ne. QLD. **Larval attendant ants:** occasionally *Iridomyrmex*, *Camponotus*, *Rhytidoponera*.



Delicate Blue

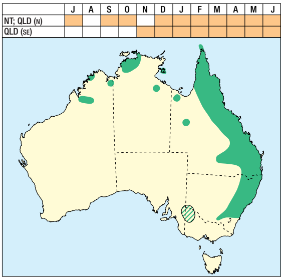


Jewelled Grass-blue



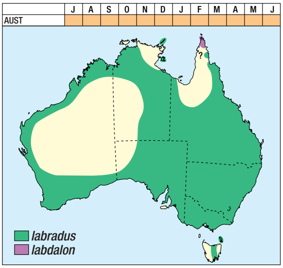
Black-spotted Grass-blue

Spotted Grass-blue *Zizeeria karsandra*



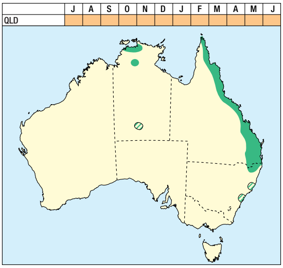
Other name: Dark Grass-blue. **Wingspan:** ♂ 20 mm, ♀ 20 mm. **Similar species:** Dainty Grass-blue, Common Grass-blue, Black-spotted Grass-blue. The Spotted Grass-blue is larger, has broader wings, and a small spot in the FW underside cell compared to the Dainty Grass-blue. **Behaviour:** adults fly close to the ground in open areas, especially near the larval food plant and amongst grass and other low-growing herbs; they frequently feed from flowers, including those of the *Tribulus* food plant. Probably several generations completed annually; adults are seasonal, being abundant only during autumn or after the wet season when the usual food plants are available. **Habitat:** open disturbed areas, such as roadside verges and paddocks where the *Tribulus* food plants grow as prostrate annual herbs; also along dry creek beds or sandy river banks in inland areas where alternate food plants grow. **Status:** very common but local. **Larval food plants:** usually *Tribulus cistoides, T. terrestris*; also *Glinus lotoides, G. oppositifolia* in inland areas. **Larval attendant ant:** occasionally small black ants.

Common Grass-blue *Zizina labradus*

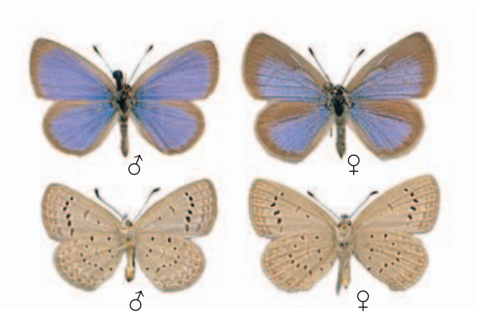


Other name: Common Blue. **Wingspan:** ♂ 20 mm, ♀ 23 mm. **Similar species:** Spotted Grass-blue, Black-spotted Grass-blue, Dainty Grass-blue. The Common Grass-blue has the underside spots faint and indistinct. **Variation:** two subspecies; *Z. l. labradus* females vary in extent and colour of purplish-lilac area on upperside. **Behaviour:** adults usually have a weak, fluttering flight close to the ground over grass and weeds, often near the larval food plants. Several generations annually. **Habitat:** wide variety of native and modified habitats, preferring open grassy areas such as pastures, sports fields and suburban gardens, wherever the larval food plants grow. **Status:** very common and widespread. **Larval food plants:** young leaves, flower buds, flowers and seedpods of a wide variety of native and introduced low-spreading legumes, including Lucerne and garden beans. **Larval attendant ants:** occasionally *Iridomyrmex, Tapinoma*, *Paratrechina*, *Prolasius*, *Rhytidoponera*.

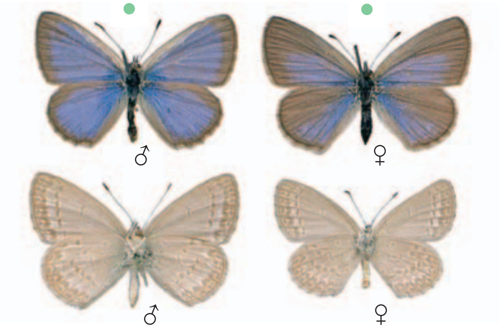
Dainty Grass-blue *Zizula hylax*



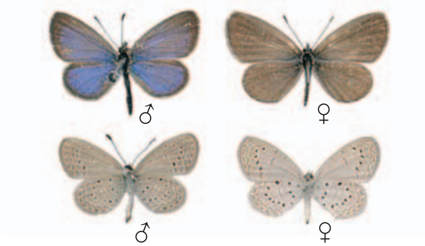
Other names: Little Grass-blue, Tiny Grass-blue. **Wingspan:** ♂ 15 mm, ♀ 16 mm. **Similar species:** Spotted Grass-blue, Common Grass-blue, Black-spotted Grass-blue. The Dainty Grass-blue is smaller, has narrower wings, and two small spots above the cell near the costa on the FW underside compared to the Spotted Grass-blue. **Behaviour:** adults fly slowly in open areas close to the ground or over pools of water amongst grasses, sedges and herbs, including the larval food plant; they settle for long periods on stems and leaves, moving their HWs sideways or laterally. Probably several generations completed annually, with adults most abundant from Mar to May during, or soon after, the wet season when the native larval food plant flowers. **Habitat:** paperbark swampland in coastal and subcoastal areas in ne. QLD, where the native larval food plant grows as an erect herb; also drier subcoastal woodlands and suburban areas. **Status:** common but very local. **Larval food plants:** usually young fruits of *Hygrophila angustifolia* in ne. QLD; **Ruellia tuberosa* in suburban areas; also **Hygrophila costata* in se. QLD; probably *Dipteracanthus australasicus* in drier subcoastal areas of QLD. **Larval attendant ant:** occasionally small black ants.



Spotted Grass-blue



Common Grass-blue



Dainty Grass-blue

Papuan Snow Flat *Tagiades nestus* Hesperidae

Wingspan: ♂ 33 mm, ♀ 37 mm. **Similar species:** Pied Flat. The Papuan Snow Flat has five, rather than four, white median spots on the FW. **Behaviour:** not recorded. In Papua New Guinea, adults fly very rapidly, and frequently settle on shrubs or low vegetation, 1–3 m above the ground, in the edges of the forest to bask with wings outspread. **Habitat:** not recorded. Known only from a single male collected from Darnley Island in eastern Torres Strait in 1910. **Status:** probably extinct in the Torres Strait islands. **Larval food plant:** not recorded.

Christmas Swallowtail *Papilio memnon* Papilionidae

Wingspan: ♂ 98 mm, ♀ 104 mm. **Similar species:** none. Christmas Swallowtail males have the upper and underside ground colour black, with blue-grey streaks in the outer half of the upperside of the wings. **Variation:** females are polymorphic, with several forms. **Behaviour:** males have been noted to fly rapidly. Number of generations completed annually not recorded. **Habitat:** suburban areas and disturbed areas adjacent to tropical rainforest; known only from Christmas Island. **Status:** common. **Larval food plant:** **Citrus*.

Norfolk Swallowtail *Papilio amynthor* Papilionidae

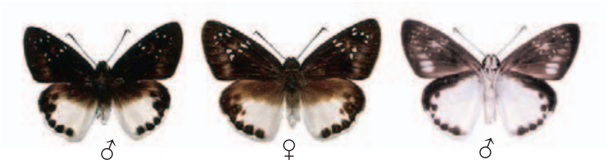
Wingspan: ♂ 85 mm, ♀ 91 mm. **Similar species:** Fuscous Swallowtail. The Norfolk Swallowtail has a broad white or cream transverse band on the FW upperside that stretches from the costa to the termen. **Behaviour:** adults fly slowly and erratically. Males usually seen patrolling along tracks and creeks, or along the edges of the forest. Number of generations completed annually not recorded. **Habitat:** rainforest; also suburban areas; known only from Norfolk Island. **Status:** common. **Larval food plants:** *Zanthoxylum pinnatum, *Citrus limon*.

Papuan Grass-yellow *Eurema blanda* Pieridae

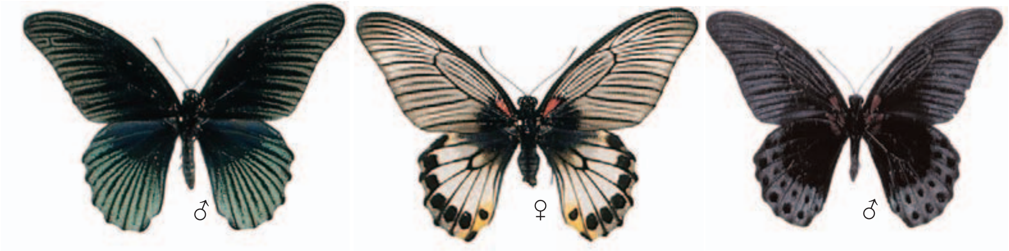
Wingspan: ♂ 40 mm, ♀ 42 mm. **Similar species:** Large Grass-yellow. Papuan Grass-yellow males usually have the FW upperside black terminal band narrowly constricted between vein M_3 and the tornus. **Behaviour:** not recorded. In Papua New Guinea, adults fly close to the ground in open or disturbed areas. **Habitat:** not recorded. Occurs on Christmas Island, and Darnley Island in eastern Torres Strait where a single male was collected at the turn of the twentieth century. **Status:** probably extinct in the Torres Strait islands. **Larval food plants:** not recorded. Probably Mimosaceae, Caesalpiniaceae.

Striped Albatross *Appias olferna* Pieridae

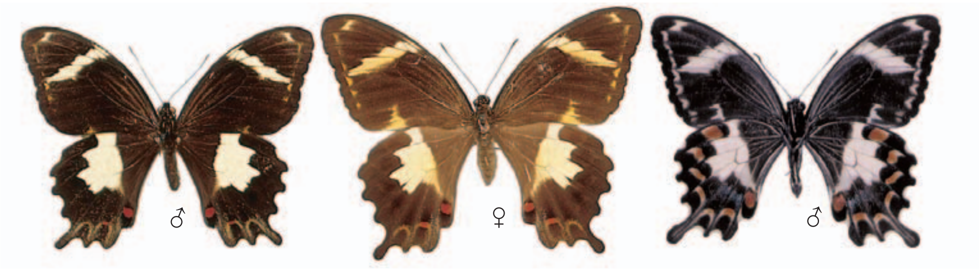
Wingspan: ♂ 48 mm, ♀ 50 mm. **Similar species:** Yellow Albatross. Striped Albatross males have black subterminal markings at the ends of veins on the upperside, and the HW underside ground colour white with the veins grey-brown. **Behaviour:** males fly rapidly during sunshine along edges of the forest, occasionally settling briefly on flowers. Females flutter more slowly close to the ground, within 1 m, and often settle on undergrowth. Number of generations completed annually not recorded; adults have been recorded in Jan and Feb. **Habitat:** adults have been collected mainly in rainforest, but also in open-forest and suburban areas; known only from Christmas Island. **Status:** common and widespread. **Larval food plants:** not recorded.



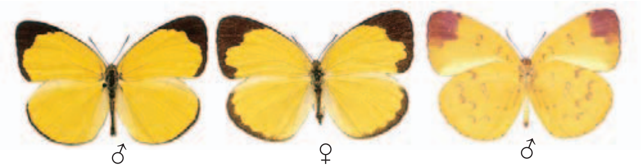
Papuan Snow Flat



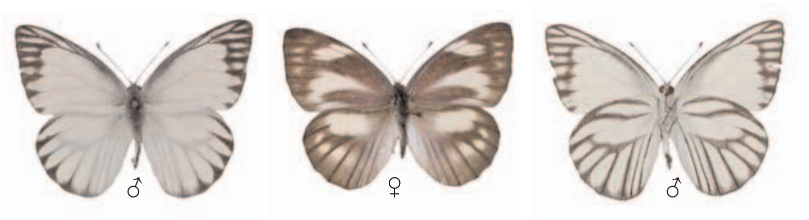
Christmas Swallowtail



Norfolk Swallowtail



Papuan Grass-yellow



Striped Albatross

Silky Owl *Taenaris catops*

Nymphalidae

Wingspan: ♂ 77 mm, ♀ 82 mm. **Similar species:** Pearl Owl. The Silky Owl has the HW underside subtornal eyespot further inwards towards the base. **Behaviour:** not recorded. In Papua New Guinea, adults fly in the shade of the forest understorey with a leisurely and direct flight; they often settle on small saplings close to the ground. **Habitat:** not recorded. Known only from two females collected from northern and eastern Torres Strait, at Saibai and Darnley islands, respectively. It has not been recorded from Darnley Island since 1910. **Status:** rare. **Larval food plants:** not recorded. Probably Agavaceae, Arecaceae, Musaceae.

Banded Evening Brown *Melanitis amabilis*

Nymphalidae

Wingspan: ♂ 64 mm, ♀ 72 mm. **Similar species:** none. The Banded Evening Brown has a broad yellow (male) or white (female) median band on the FW upperside. **Behaviour:** not recorded. In Papua New Guinea, adults fly at dusk, remaining settled during the day amongst leaf litter on the rainforest floor. **Habitat:** not recorded. Known only from a single male collected from Darnley Island in eastern Torres Strait in 1910. **Status:** probably extinct in the Torres Strait islands. **Larval food plant:** not recorded. Probably Poaceae.

Papuan Evening Brown *Melanitis constantia*

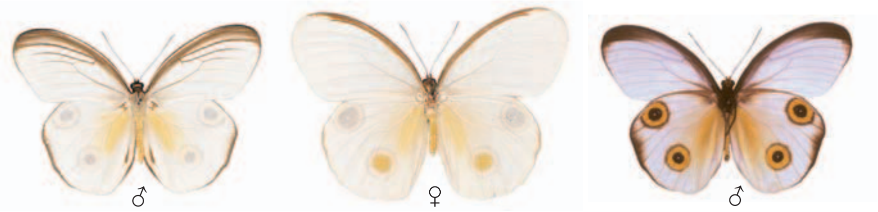
Nymphalidae

Wingspan: ♂ 70 mm, ♀ 77 mm. **Similar species:** Evening Brown, Banded Evening Brown. Papuan Evening Brown males have an obscure orange postmedian band, without prominent eyespots, on the FW upperside; females have a broad pale yellow postmedian band, which encloses a small white spot ringed with dark brown and a small dark brown spot centred white, on the FW upperside. **Behaviour:** adults fly at dusk, and are attracted to rotting fruit. Probably several generations completed annually. **Habitat:** rainforest edge, favouring tall grassy areas; known only from Murray Island in eastern Torres Strait. **Status:** common. **Larval food plant:** Poaceae.

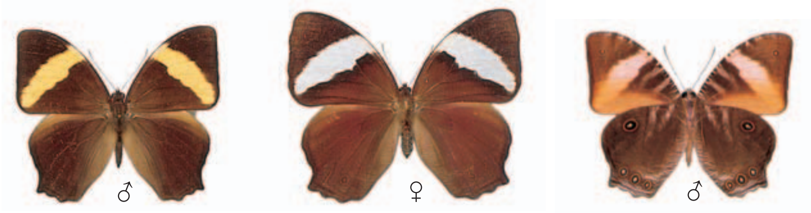
Christmas Emperor *Polyura andrewsi*

Nymphalidae

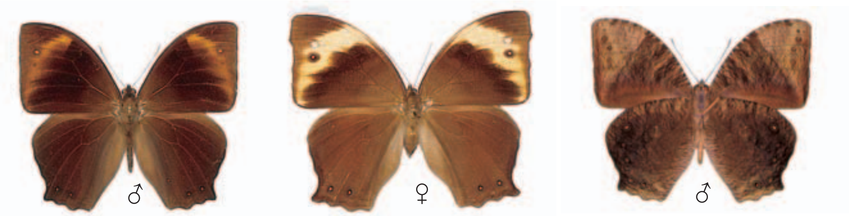
Wingspan: ♂ 68 mm, ♀ 82 mm. **Similar species:** Tailed Emperor. The Christmas Emperor has the upperside colour broadly black; females have the FW basal areas pale yellow, rather than cream, and reduced in extent. **Behaviour:** adults fly rapidly and high in the forest. Number of generations completed annually not recorded. **Habitat:** tropical rainforest; known only from Christmas Island. **Status:** uncommon. **Larval food plant:** not recorded.



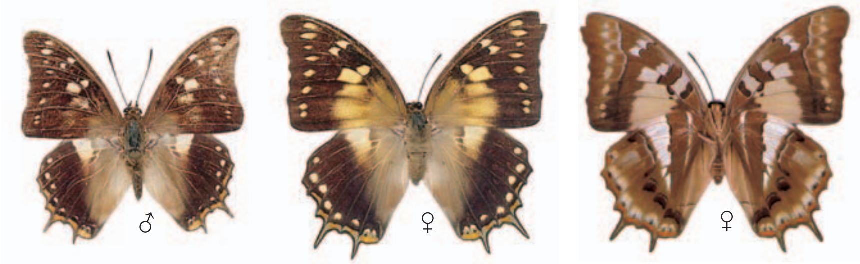
Silky Owl



Banded Evening Brown



Papuan Evening Brown



Christmas Emperor

Spotted Crow Eggfly *Hypolimnas antilope* Nymphalidae

Wingspan: ♂ 64 mm, ♀ 70 mm. **Similar species:** Crow Eggfly, Bates' Crow. The Spotted Crow Eggfly usually has a broad variable pale subterminal band on the HW upperside. It has the wings broader, with the FW tornus sharply angled, rather than rounded, compared to Bates' Crow. **Variation:** adults are polymorphic, with several forms. **Behaviour:** males are very territorial and perch on the foliage of trees, 2–4 m above the ground, where they sit facing an open area to establish territories along the edges of the forest. Number of generations completed annually not recorded; adults are abundant seasonally. **Habitat:** rainforest edge and clearings in the forest, where the larval food plant grows as a pioneer species. Occurs on Murray and Yorke islands in eastern Torres Strait. **Status:** common but very local. **Larval food plant:** *Piturus argenteus*.

Wide-brand Crow *Euploea netscheri* Nymphalidae

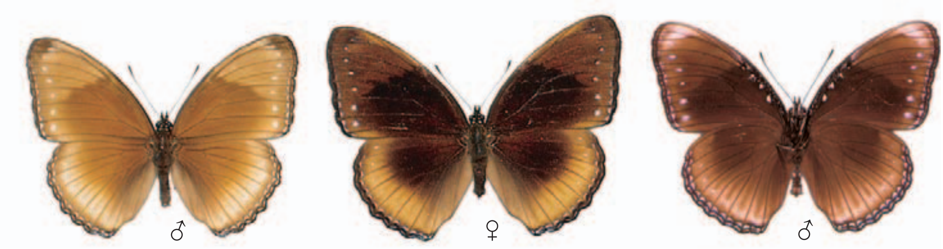
Wingspan: ♂ 61 mm, ♀ 64 mm. **Similar species:** No-brand Crow, Mournful Crow, Bates' Crow. Wide-brand Crow males have the FW sex-brand very broad, and pale margins of the wings. It has the FWs narrower, and the upperside unmarked compared to the No-brand and Mournful crows. **Behaviour:** not recorded. **Habitat:** not recorded. known only from a single male collected recently from Dauan Island in northern Torres Strait. **Status:** rare. **Larval food plant:** not recorded.

Papuan Cerulean *Jamides nemophila* Lycaenidae

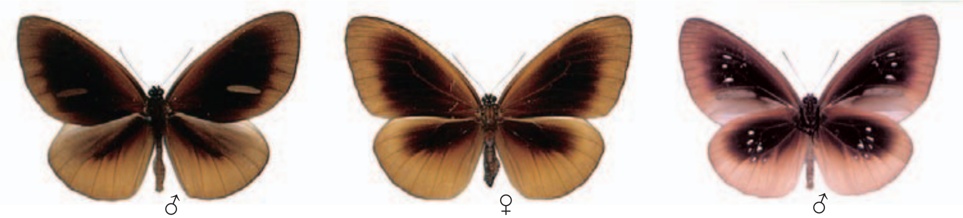
Wingspan: ♂ 29 mm, ♀ 29 mm. **Similar species:** White-banded Cerulean. The Papuan Cerulean has a broken band of black subterminal spots, each outwardly and inwardly edged with iridescent blue-green, on the HW underside. **Behaviour:** not recorded. **Habitat:** rainforest. Known only from Darnley Island in eastern Torres Strait. **Status:** uncommon. **Larval food plant:** not recorded. Possibly *Strongylodon* (Fabaceae).

King Cerulean *Jamides bochus* Lycaenidae

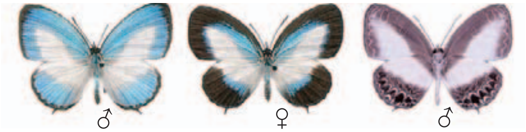
Wingspan: ♂ 22 mm, ♀ 22 mm. **Similar species:** Purple Cerulean. The King Cerulean has the underside markings more conspicuously edged with white, and the HW underside black subtornal spot larger; males have the upperside colour brighter blue, and the FW termen broadly black. **Behaviour:** not recorded. **Habitat:** not recorded. Known only from Christmas Island. **Status:** not recorded. **Larval food plant:** not recorded.



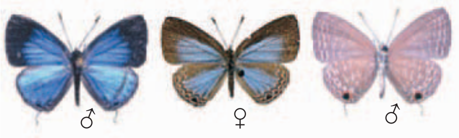
Spotted Crow Eggfly



Wide-brand Crow



Papuan Cerulean



King Cerulean

Bold Line-blue *Nacaduba pactolus* Lycaenidae

Wingspan: ♂ 27 mm, ♀ 27 mm. **Similar species:** none. The Bold Line-blue has the underside markings as conspicuous white bands. **Behaviour:** not recorded. **Habitat:** not recorded. Known only from three specimens from the eastern Torres Strait, at Darnley and Murray islands. **Status:** rare. **Larval food plant:** not recorded.

Violet Line-blue *Nacaduba calauria* Lycaenidae

Wingspan: ♂ 18 mm, ♀ 20 mm. **Similar species:** Large Purple Line-blue. The Violet Line-blue has the underside ground colour grey; males have the upperside colour violet, rather than lilac. **Behaviour:** not recorded. **Habitat:** not recorded. Occurs in northern and eastern Torres Strait, from Dauan and Murray islands, respectively. **Status:** uncommon. **Larval food plant:** not recorded.

Dark Green-banded Blue *Nothodanis schaeffera* Lycaenidae

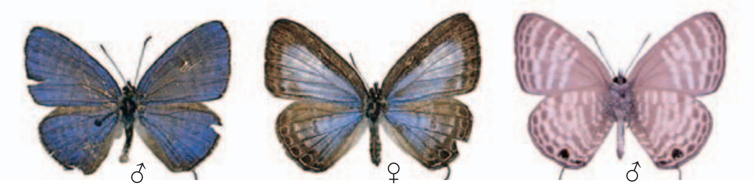
Wingspan: ♀ 30 mm. **Similar species:** Large Green-banded Blue. The Dark Green-banded Blue has the FW underside iridescent green costal streak reduced to the base; females have the HW upperside uniformly black. **Behaviour:** not recorded. **Habitat:** not recorded. Known only from a few females from Murray Island in eastern Torres Strait. **Status:** rare. **Larval food plant:** not recorded.

Gracile Line-blue *Prosotas gracilis* Lycaenidae

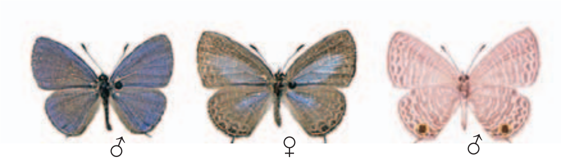
Other names: New Guinea Line-blue, Papuan Line-blue. **Wingspan:** ♂ 22 mm, ♀ 23 mm. **Similar species:** Purple Line-blue, Long-tailed Line-blue. The Gracile Line-blue is larger; males have the FW apex sharply pointed. It has the FW underside bands more clearly separated, with the subbasal band shorter and restricted to the cell, than in the Purple Line-blue. It has the HW without a tail compared to the Long-tailed Line-blue. **Behaviour:** adults have been observed feeding from flowers of *Pongamia*. Number of generations completed annually not recorded. **Habitat:** not recorded. Known only from two specimens from Dauan Island in northern Torres Strait. **Status:** rare. **Larval food plant:** not recorded.

Lesser Grass-blue *Zizina otis* Lycaenidae

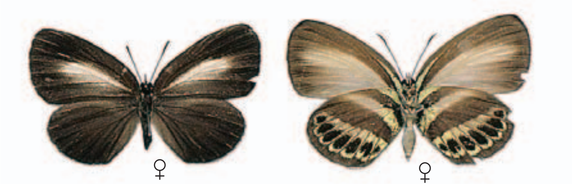
Wingspan: ♂ 20 mm, ♀ 21 mm. **Similar species:** Common Grass-blue. **Behaviour:** not recorded. **Habitat:** not recorded. Known only from Christmas Island. **Status:** common. **Larval food plant:** not recorded. Probably Fabaceae.



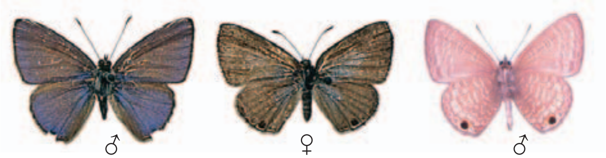
Bold Line-blue



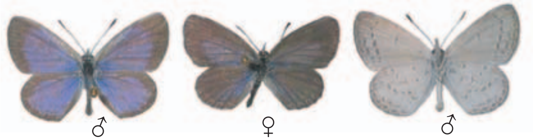
Violet Line-blue



Dark Green-banded Blue



Gracile Line-blue



Lesser Grass-blue

Checklist of Australian butterflies

Note: * denotes those species recorded from remote islands only.
† denotes species introduced to Australia.

SUPERFAMILY HESPERIOIDEA

Family Hesperiidae

Subfamily Pyrginae

- *Euschemon rafflesia* (W.S. Macleay, 1826)
  - *E. r. rafflesia* (W.S. Macleay, 1826)
  - *E. r. alba* Mabille, [1903]
- *Chaetocneme denitza* (Hewitson, 1867)
- *Chaetocneme beata* (Hewitson, 1867)
- *Chaetocneme critomedia* (Guérin-Méneville, [1831])
- *Chaetocneme porphyropis* (Meyrick & Lower, 1902)
- *Netrocoryne repanda* C. Felder & R. Felder, [1867]
  - *N. r. repanda* C. Felder & R. Felder, [1867]
  - *N. r. expansa* Waterhouse, 1932
- *Exometoeca nycteris* Meyrick, 1888
- *Tagiades japetus* (Stoll, [1781])
- **Tagiades nestus* (C. Felder, 1860)

Subfamily Coeliadinae

- *Allora doleschallii* (C. Felder, 1860)
- *Allora major* (Rothschild, 1915)
- *Hasora discolor* (C. Felder & R. Felder, 1859)
- *Hasora hurama* (Butler, 1870)
- *Hasora chromus* (Cramer, [1780])
- *Hasora khoda* (Mabille, 1876)
- *Badamia exclamationis* (Fabricius, 1775)

Subfamily Trapezitinae

- *Rachelia extrusus* (C. Felder & R. Felder, [1867])
- *Trapezites phigalia* (Hewitson, 1868)
- *Trapezites phigalioides* Waterhouse, 1903
- *Trapezites iacchoides* Waterhouse, 1903
- *Trapezites maheta* (Hewitson, 1877)
- *Trapezites praxedes* (Plötz, 1884)
- *Trapezites genevieveae* Atkins, 1997
- *Trapezites lutea* (Tepper, 1882)
  - *T. l. lutea* (Tepper, 1882)
  - *T. l. glaucus* Waterhouse & Lyell, 1914
  - *T. l. leucon* Waterhouse, 1938
- *Trapezites sciron* Waterhouse & Lyell, 1914
  - *T. s. sciron* Waterhouse & Lyell, 1914
  - *T. s. eremicola* Burns, [1948]
- *Trapezites atkinsi* A.A.E. Williams, M.R. Williams & R.W. Hay 1998
- *Trapezites argenteoornatus* (Hewitson, 1868)
- *Trapezites waterhousei* Mayo & Atkins, 1992
- *Trapezites macqueeni* Kerr & Sands, 1970
- *Trapezites petalia* (Hewitson, 1868)
- *Trapezites iacchus* (Fabricius, 1775)
- *Trapezites heteromacula* Meyrick & Lower, 1902
- *Trapezites eliena* (Hewitson, 1868)
- *Trapezites taori* Atkins, 1997
- *Trapezites symmomus* Hübner, 1823
  - *T. s. symmomus* Hübner, 1823
  - *T. s. soma* Waterhouse, 1932
  - *T. s. sombra* Waterhouse, 1932
- *Anisynta sphenosema* (Meyrick & Lower, 1902)
- *Anisynta cynone* (Hewitson, [1874])
  - *A. c. cynone* (Hewitson, [1874])
  - *A. c. gunneda* L.E. Couchman, 1954
- *Anisynta tillyardi* Waterhouse & Lyell, 1912
- *Anisynta monticolae* (Olliff, 1890)
- *Anisynta dominula* (Plötz, 1884)
  - *A. d. dominula* (Plötz, 1884)
  - *A. d. pria* (Waterhouse, 1932)
- *Pasma tasmanicus* (Miskin, 1889)
- *Dispar compacta* (Butler, 1882)
- *Neohesperilla senta* (Miskin, 1891)
- *Neohesperilla xiphiphora* (Lower, 1911)
- *Neohesperilla croceus* (Miskin, 1889)
- *Neohesperilla xanthomera* (Meyrick & Lower, 1902)
- *Toxidia andersoni* (Kirby, 1893)
- *Toxidia doubledayi* (C. Felder, 1862)
- *Toxidia rietmanni* (Semper, [1879])
  - *T. r. rietmanni* (Semper, [1879])
  - *T. r. parasema* Lower, 1908
- *Toxidia inornatus* (Butler, 1883)

- *Toxidia melania* (Waterhouse, 1903)
- *Toxidia thyrrhus* Mabille, 1891
- *Toxidia parvulus* (Plötz, 1884)
- *Toxidia peron* (Latreille, [1824])
- *Signeta flammeata* (Butler, 1882)
- *Signeta tymbophora* (Meyrick & Lower, 1902)
- *Oreisplanus munionga* (Olliff, 1890)
  - *O. m. munionga* (Olliff, 1890)
  - *O. m. larana* L.E. Couchman, 1962
- *Oreisplanus perornata* (Kirby, 1893)
- *Hesperilla ornata* (Leach, 1814)
  - *H. o. ornata* (Leach, 1814)
  - *H. o. monotherm* (Lower, 1907)
- *Hesperilla picta* (Leach, 1814)
- *Hesperilla crypsargyra* (Meyrick, 1888)
  - *H. c. crypsargyra* (Meyrick, 1888)
  - *H. c. hopsoni* Waterhouse, 1927
- *Hesperilla mastersi* Waterhouse, 1900
- *Hesperilla idothea* (Miskin, 1889)
  - *H. i. idothea* (Miskin, 1889)
  - *H. i. clara* Waterhouse, 1932
- *Hesperilla donnysa* Hewitson, 1868
  - *H. d. donnysa* Hewitson, 1868
  - *H. d. aurantia* Waterhouse, 1927
  - *H. d. galena* Waterhouse, 1927
  - *H. d. albina* Waterhouse, 1932
- *Hesperilla flavescens* Waterhouse, 1927
- *Hesperilla chrysotricha* (Meyrick & Lower, 1902)
  - *H. c. chrysotricha* (Meyrick & Lower, 1902)
  - *H. c. cyclospila* (Meyrick & Lower, 1902)
- *Hesperilla malindeva* Lower, 1911
- *Hesperilla sarnia* Atkins, 1978
- *Hesperilla sexguttata* Herrich-Schäffer, 1869
- *Hesperilla furva* Sands & Kerr, 1973
- *Hesperilla crypsigramma* Meyrick & Lower, 1902)
  - 'eastern form'
  - 'northern form'
- *Motasingha trimaculata* (Tepper, 1882)
  - *M. t. trimaculata* (Tepper, 1882)
  - *M. t. dilata* Waterhouse, 1932
  - *M. t. occidentalis* Moulds & Atkins, 1986
- *Motasingha dirphia* (Hewitson, 1868)
- *Antipodia chaostola* (Meyrick, 1888)
  - *A. c. chaostola* (Meyrick, 1888)
  - *A. c. chares* (Waterhouse, 1933)
  - *A. c. leucophaea* (L.E. Couchman, 1946)
- *Antipodia atralba* (Tepper, 1882)
- *Antipodia dactyliota* (Meyrick, 1888)
  - *A. d. dactyliota* (Meyrick, 1888)
  - *A. d. nila* (Waterhouse, 1932)
- *Proeidosa polysema* (Lower, 1908)
  - 'large spot form'
  - 'small spot form'
- *Herimosa albovenata* (Waterhouse, 1940)
  - *H. a. albovenata* (Waterhouse, 1940)
  - *H. a. weemala* (Waterhouse, 1940)
  - *H. a. fuscata* (Parsons, 1965)
- *Croitana croites* (Hewitson, [1874])
  - 'pale form'
  - 'dark form'
- *Croitana arenaria* E.D. Edwards, 1979
  - *C. a. arenaria* E.D. Edwards, 1979
  - *C. a. pilepudla* Grund, 2003
- *Croitana aestiva* E.D. Edwards, 1979
- *Mesodina aeluropis* Meyrick, 1901
- *Mesodina halyzia* (Hewitson, 1868)
- *Mesodina gracillima* E.D. Edwards, 1987
- *Mesodina cyanophracta* Lower, 1911
- *Mesodina hayi* E.D. Edwards & A.J. Graham, 1995

Subfamily Hesperiinae

- *Notocrypta waigensis* (Plötz, 1882)
- *Taractrocera anisomorpha* (Lower, 1911)
- *Taractrocera ina* Waterhouse, 1932
- *Taractrocera dolon* (Plötz, 1884)
  - *T. d. dolon* (Plötz, 1884)
  - *T. d. diomedes* Waterhouse, 1933
- *Taractrocera ilia* Waterhouse, 1932
- *Taractrocera papyria* (Boisduval, 1832)
  - *T. p. papyria* (Boisduval, 1832)
  - *T. p. agraulia* (Hewitson, 1868)
- *Ocybadistes hypomeloma* Lower, 1911
  - *O. h. hypomeloma* Lower, 1911
  - *O. h. vaga* (Waterhouse, 1932)
- *Ocybadistes flavovittata* (Latreille, [1824])
  - *O. f. flavovittata* (Latreille, [1824])
  - *O. f. vesta* (Waterhouse, 1932)
- *Ocybadistes walkeri* Heron, 1894
  - *O. w. sothis* Waterhouse, 1933
  - *O. w. hypochlora* Lower, 1911
  - *O. w. olivia* Waterhouse, 1933
- *Ocybadistes knightorum* Lambkin & Donaldson, 1994
- *Ocybadistes ardea* Bethune-Baker, 1906

Suniana lascivia (Rosenstock, 1885)
S. l. lascivia (Rosenstock, 1885)
S. l. neocles (Mabille, 1891)
S. l. larrakia L.E. Couchman, 1951
S. l. lasus Waterhouse, 1937
Suniana sunias (C. Felder, 1860)
S. s. rectivitta (Mabille, 1878)
S. s. sauda Waterhouse, 1937
Arrhenes marnas (C. Felder, 1860)
Arrhenes dschilus (Plötz, 1885)
Telicota eurotas (C. Felder, 1860)
Telicota eurychlora Lower, 1908
Telicota colon (Fabricius, 1775)
Telicota ancilla (Herrich-Schaffer, 1869)
T. a. ancilla (Herrich-Schaffer, 1869)
T. a. baudina Evans, 1949
Telicota ohara (Plötz, 1883)
Telicota anisodesma Lower, 1911
Telicota augias (Linnaeus, 1763)
Telicota mesoptis Lower, 1911
Telicota brachydesma Lower, 1908
Cephrenes augiades (C. Felder, 1860)
Cephrenes trichopepla (Lower, 1908)
Sabera caesina (Hewitson, 1866)
Sabera dobboe (Plötz, 1885)
Sabera fuliginosa (Miskin, 1889)
Mimene atropatene (Fruhstorfer, 1911)
Pelopidas lyelli (Rothschild, 1915)
Pelopidas agna (Moore, [1866])
Parnara amalia (Semper, [1879])
Parnara bada (Moore, 1878)
Borbo impar (Mabille, 1883)
B. i. lavinia (Waterhouse, 1932)
B. i. tetragraphus (Mabille, 1891)
Borbo cinnara (Wallace, 1866)

SUPERFAMILY PAPILIONOIDEA
Family Papilionidae
Subfamily Papilioninae
Tribe Graphiini
Protographium leosthenes (Doubleday, 1846)
P. l. leosthenes (Doubleday, 1846)
P. l. geimbia (Tindale, 1927)
Graphium aristeus (Stoll, [1780])
Graphium macleayanus (Leach, 1814)
G. m. macleayanus (Leach, 1814)
G. m. moggana L.E. Couchman, 1965
Graphium sarpedon (Linnaeus, 1758)
Graphium eurypylus (Linnaeus, 1758)
G. e. lycaon (C. Felder & R. Felder, 1865)
G. e. nyctimus (Waterhouse & Lyell, 1914)
G. e. lycanoides (Rothschild, 1895)
Graphium macfarlanei (Butler, 1877)
Graphium agamemnon (Linnaeus, 1758)
Tribe Papilionini
Papilio anactus W.S. Macleay, 1826
Papilio aegeus Donovan, 1805
P. a. aegeus Donovan, 1805
P. a. ormenus Guérin-Méneville, [1830]
Papilio ambrax Boisduval, 1832
Papilio fuscus Goeze, 1779
P. f. capaneus Westwood, 1843
P. f. canopus Westwood, 1842
P. f. indicatus Butler, 1876
Papilio ulysses Linnaeus, 1758
Papilio demoleus Linnaeus, 1758
**Papilio memnon* Linnaeus, 1758
**Papilio amynthor* Boisduval, 1859
Tribe Troidini
Cressida cressida (Fabricius, 1775)
Pachliopta polydorus (Linnaeus, 1763)
Ornithoptera richmondia (Gray, [1853])
Ornithoptera euphorion (Gray, [1853])
Ornithoptera priamus (Linnaeus, 1758)
O. p. poseidon (Doubleday, 1847)
O. p. pronomus (Gray, [1853])
O. p. macalpinei (Moulds, 1974)

Family Pieridae
Subfamily Coliadinae
Catopsilia pyranthe (Linnaeus, 1758)
Catopsilia pomona (Fabricius, 1775)
Catopsilia scylla (Linnaeus, 1764)
Catopsilia gorgophone (Boisduval, 1836)
Eurema brigitta (Stoll, 1780)
Eurema laeta (Boisduval, 1836)
Eurema herla (W.S. Macleay, 1826)
Eurema smilax (Donovan, 1805)
Eurema puella (Boisduval, 1832)
Eurema alitha (C. & R. Felder, 1862)
Eurema hecabe (Linnaeus, 1758)
**Eurema blanda* (Boisduval, 1836)
Subfamily Pierinae
Tribe Pierini
†*Pieris rapae* (Linnaeus, 1758)

Tribe Aporiini
Cepora perimale (Donovan, 1805)
Delias nysa (Fabricius, 1775)
  D. n. nysa (Fabricius, 1775)
  D. n. nivira Waterhouse & Lyell, 1914
Delias ennia (Wallace, 1867)
  D. e. nigidius Miskin, 1884
  D. e. tindalii Joicey & Talbot, 1926
Delias aruna (Boisduval, 1832)
Delias harpalyce (Donovan, 1805)
Delias nigrina (Fabricius, 1775)
Delias mysis (Fabricius, 1775)
  D. m. mysis (Fabricius, 1775)
  D. m. aestiva Butler, 1897
  D. m. onca Fruhstorfer, 1910
Delias argenthona (Fabricius, 1793)
Delias aganippe (Donovan, 1805)
***Appias* group**
Appias paulina (Cramer, [1777])
Appias melania (Fabricius, 1775)
Appias celestina (Boisduval, 1832)
Appias albina (Boisduval, 1836)
Appias ada (Stoll, [1781])
**Appias olferna* Swinhoe, 1890
Genera of uncertain placement
Elodina parthia (Hewitson, 1853)
Elodina padusa (Hewitson, 1853)
Elodina angulipennis (P.H. Lucas, 1852)
Elodina queenslandica De Baar & Hancock, 1993
Elodina walkeri Butler, 1898
Elodina perdita Miskin, 1889
Elodina claudia De Baar & Hancock, 1993
Leptosia nina (Fabricius, 1793)
Belenois java (Linnaeus, 1768)
  B. j. teutonia (Fabricius, 1775)
  B. j. peristhene (Boisduval, 1859)

Family Nymphalidae
Subfamily Morphinae
Tribe Amathusiini
Taenaris artemis (Snellen van Vollenhoven, 1860)
**Taenaris catops* (Westwood, 1851)
Subfamily Satyrinae
Tribe Biini
Subtribe Melanititi
Melanitis leda (Linnaeus, 1758)
**Melanitis amabilis* (Boisduval, 1832)
**Melanitis constantia* (Cramer, 1777)
Tribe Elymniini
Subtribe Elymniiti
Elymnias agondas (Boisduval, 1832)
Subtribe Mycalesiti
Orsotriaena medus (Fabricius, 1775)
Mycalesis perseus (Fabricius, 1775)
Mycalesis sirius (Fabricius, 1775)
Mycalesis terminus (Fabricius, 1775)
Tribe Satyrini
Subtribe Ypthimiti
Ypthima arctous (Fabricius, 1775)
Subtribe Hypocystiti
Hypocysta angustata Waterhouse & Lyell, 1914
Hypocysta irius (Fabricius, 1775)
Hypocysta metirius Butler, 1875
Hypocysta pseudirius Butler, 1875
Hypocysta adiante (Hübner, 1831)
  H. a. adiante (Hübner, 1831)
  H. a. antirius Butler, 1868
Hypocysta euphemia Westwood, 1851
Nesoxenica leprea (Hewitson, 1864)
  N. l. leprea (Hewitson, 1864)
  N. l. elia Waterhouse & Lyell, 1914
Argynnina cyrila Waterhouse & Lyell, 1914
Argynnina hobartia (Westwood, 1851)
  A. h. hobartia (Westwood, 1851)
  A. h. tasmanica (Lyell, 1900)
  A. h. montana L.E. Couchman & R. Couchman, 1977
Oreixenica orichora (Meyrick, 1885)
  O. o. orichora (Meyrick, 1885)
  O. o. paludosa (T.P. Lucas, 1892)
Oreixenica latialis Waterhouse & Lyell, 1914
  O. l. latialis Waterhouse & Lyell, 1914
  O. l. theddora L.E. Couchman, 1953
Oreixenica ptunarra L.E. Couchman, 1953
Oreixenica lathoniella (Westwood, 1851)
  O. l. lathoniella (Westwood, 1851)
  O. l. laranda Waterhouse & Lyell, 1914
  O. l. barnardi Turner, 1926
  O. l. herceus Waterhouse & Lyell, 1914
Oreixenica correae (Olliff, 1890)
Oreixenica kershawi (Miskin, 1876)
  O. k. kershawi (Miskin, 1876)
  O. k. ella (Olliff, 1888)
  O. k. kanunda Tindale, 1949
Geitoneura acantha (Donovan, 1805)
Geitoneura klugii (Guérin-Méneville, [1830])
  'dark form'
  'pale form'

- *Geitoneura minyas* (Waterhouse & Lyell, 1914)
- *Heteronympha mirifica* (Butler, 1866)
- *Heteronympha merope* (Fabricius, 1775)
  - *H. m. merope* (Fabricius, 1775)
  - *H. m. duboulayi* (Butler, 1867)
  - *H. m. salazar* Fruhstorfer, 1911
- *Heteronympha penelope* Waterhouse, 1937
  - *H. p. penelope* Waterhouse, 1937
  - *H. p. alope* Waterhouse, 1937
  - *H. p. diemeni* Waterhouse, 1937
  - *H. p. panope* Waterhouse, 1937
- *Heteronympha paradelpha* Lower, 1893
- *Heteronympha banksii* (Leach, 1814)
  - *H. b. banksii* (Leach, 1814)
  - *H. b. mariposa* Tindale, 1953
  - *H. b. nevina* Tindale, 1953
- *Heteronympha solandri* Waterhouse, 1904
- *Heteronympha cordace* (Geyer, 1832)
  - *H. c. cordace* (Geyer, 1832)
  - *H. c. wilsoni* Burns, [1948]
  - *H. c. comptena* L.E. Couchman, 1954
  - *H. c. kurena* L.E. Couchman, 1954
  - *H. c. legana* L.E. Couchman, 1954
- *Tisiphone helena* (Olliff, 1888)
- *Tisiphone abeona* (Donovan, 1805)
  - *T. a. abeona* (Donovan, 1805)
  - *T. a. albifascia* Waterhouse, 1904
  - *T. a. aurelia* Waterhouse, 1915
  - *T. a. morrisi* Waterhouse, 1914
  - *T. a. regalis* Waterhouse, 1928
  - *T. a. rawnsleyi* (Miskin, 1876)

Subfamily Charaxinae

- *Polyura sempronius* (Fabricius, 1793)
- **Polyura andrewsi* (Butler, 1900)
- *Charaxes latona* Butler, 1865

Subfamily Apaturinae

- *Apaturina erminea* (Cramer, [1779])

Subfamily Heliconiinae

Tribe Acraeini

- *Acraea andromacha* (Fabricius, 1775)

Tribe Heliconiini

- *Cethosia cydippe* (Linnaeus, 1767)
- *Cethosia penthesilea* (Cramer, 1777)

Tribe Vagrantini

- *Vindula arsinoe* (Cramer, [1777])
- *Cupha prosope* (Fabricius, 1775)
- *Vagrans egista* (Cramer, [1780])
- *Phalanta phalantha* (Drury, [1773])

Tribe Argynnini

- *Argyreus hyperbius* (Linnaeus, 1763)

Subfamily Nymphalinae

- *Doleschallia bisaltide* (Cramer, [1777])
- *Hypolimnas alimena* (Linnaeus, 1758)
  - *H. a. lamina* Fruhstorfer, 1903
  - *H. a. darwinensis* Waterhouse & Lyell, 1914
- *Hypolimnas bolina* (Linnaeus, 1758)
- *Hypolimnas misippus* (Linnaeus, 1764)
- *Hypolimnas anomala* (Wallace, 1869)
- **Hypolimnas antilope* (Cramer, [1777])
- *Yoma sabina* (Cramer, [1780])
- *Junonia orithya* (Linnaeus, 1758)
- *Junonia villida* (Fabricius, 1787)
- *Junonia hedonia* (Linnaeus, 1764)
- *Junonia erigone* (Cramer, [1775])
- *Vanessa kershawi* (McCoy, 1868)
- *Vanessa cardui* (Linnaeus, 1758)
- *Vanessa itea* (Fabricius, 1775)
- *Mynes geoffroyi* (Guérin-Méneville, [1830])

Subfamily Biblidinae

- *Pantoporia consimilis* (Boisduval, 1832)
- *Pantoporia venilia* (Linnaeus, 1758)
- *Neptis praslini* (Boisduval, 1832)
- *Phaedyma shepherdi* (Moore, 1858)
- *Lexias aeropa* (Linnaeus, 1758)

Subfamily Libytheinae

- *Libythea geoffroy* Godart, [1824]
  - *L. g. genia* Waterhouse, 1938
  - *L. g. nicevillei* Olliff, 1891

Subfamily Danainae

Tribe Danaini

- *Tirumala hamata* (W.S. Macleay, 1826)
- *Danaus chrysippus* (Linnaeus, 1758)
  - *D. c. petilia* (Stoll, 1790)
  - *D. c. cratippus* (C. Felder, 1860)
- *Danaus genutia* (Cramer, [1779])
- *Danaus affinis* (Fabricius, 1775)
  - *D. a. affinis* (Fabricius, 1775)
  - *D. a. gelanor* (Waterhouse & Lyell, 1914)
- *Danaus plexippus* (Linnaeus, 1758)
- *Euploea sylvester* (Fabricius, 1793)
  - *E. s. sylvester* (Fabricius, 1793)
  - *E. s. pelor* Doubleday, 1847
- *Euploea leucostictos* (Gmelin, 1790)
- *Euploea tulliolus* (Fabricius, 1793)

Euploea darchia W.S. Macleay, 1826
E. d. darchia W.S. Macleay, 1826
E. d. niveata (Butler, 1875)
Euploea core (Cramer, [1780])
Euploea algea (Godart, 1819)
Euploea alcathoe (Godart, [1819])
E. a. eichhorni Staudinger, 1884
E. a. enastri Fenner, 1991
E. a. monilifera (Moore, 1883)
Euploea climena (Stoll, [1782])
Euploea batesii C. Felder & R. Felder, [1865]
**Euploea netscheri* Snellen, 1889
Tribe Tellervini
Tellervo zoilus (Fabricius, 1775)
T. z. zoilus (Fabricius, 1775)
T. z. gelo Waterhouse & Lyell, 1914

Family Riodinidae
Subfamily Nemeobiinae
Praetaxila segecia (Hewitson, [1861])

Family Lycaenidae
Subfamily Miletinae
Tribe Liphyrini
Liphyra brassolis Westwood, [1864]
Subfamily Theclinae
Tribe Luciini
Lucia limbaria (Swainson, 1833)
Acrodipsas myrmecophila (Waterhouse & Lyell, 1913)
Acrodipsas brisbanensis (Miskin, 1884)
Acrodipsas cuprea (Sands, 1965)
'copper form'
'blue form'
'pale copper form'
Acrodipsas aurata Sands, 1997
Acrodipsas illidgei (Waterhouse & Lyell, 1914)
Acrodipsas arcana (Miller & E.D. Edwards, 1978)
Acrodipsas melania Sands, 1980
Acrodipsas hirtipes Sands, 1980
Acrodipsas mortoni Sands, Miller & Kerr 1997
Paralucia pyrodiscus (Doubleday, 1847)
Paralucia aurifer (Blanchard, [1848])
Paralucia spinifera E.D. Edwards & Common, 1978
Pseudodipsas eone (C. Felder & R. Felder, 1860)
Pseudodipsas cephenes Hewitson, 1874
Hypochrysops apollo Miskin, 1891
H. a. apollo Miskin, 1891
H. a. phoebus (Waterhouse, 1928)
Hypochrysops elgneri (Waterhouse & Lyell, 1909)
H. e. elgneri (Waterhouse & Lyell, 1909)
H. e. barnardi Waterhouse, 1934
Hypochrysops narcissus (Fabricius, 1775)
H. n. narcissus (Fabricius, 1775)
H. n. sabirius (Fruhstorfer, 1908)
Hypochrysops cleon Grose-Smith, 1900
Hypochrysops miskini (Waterhouse, 1903)
Hypochrysops digglesii (Hewitson, 1874)
Hypochrysops polycletus (Linnaeus, 1758)
Hypochrysops theon C. Felder & R. Felder, 1865
H. t. medocus (Fruhstorfer, 1908)
H. t. cretatus Sands, 1986
Hypochrysops hippuris Hewitson, 1874
Hypochrysops pythias C. Felder & R. Felder, 1865
Hypochrysops byzos (Boisduval, 1832)
Hypochrysops apelles (Fabricius, 1775)
Hypochrysops ignita (Leach, 1814)
H. i. ignita (Leach, 1814)
H. i. chrysonotus Grose-Smith, 1899
H. i. erythina (Waterhouse & Lyell, 1914)
H. i. olliffi Miskin, 1889
Hypochrysops cyane (Waterhouse & Lyell, 1914)
Hypochrysops piceata Kerr, Macqueen & Sands, 1969
Hypochrysops epicurus Miskin, 1876
Hypochrysops delicia Hewitson, 1875
H. d. delicia Hewitson, 1875
H. d. duaringae (Waterhouse, 1903)
Hypochrysops halyaetus Hewitson, 1874
Philiris diana Waterhouse & Lyell, 1914
P. d. diana Waterhouse & Lyell, 1914
P. d. papuanus Wind & Clench, 1947
Philiris fulgens (Grose-Smith & Kirby, 1897)
Philiris azula Wind & Clench, 1947
Philiris ziska (Grose-Smith, 1898)
Philiris innotatus (Miskin, 1874)
Philiris nitens (Grose-Smith, 1898)
P. n. nitens (Grose-Smith, 1898)
P. n. lucina Waterhouse & Lyell, 1914
Philiris sappheira Sands, 1980
Tribe Arhopalini
Arhopala centaurus (Fabricius, 1775)
A. c. centaurus (Fabricius, 1775)
A. c. asopus Waterhouse & Lyell, 1914

  - *Arhopala madytus* Fruhstorfer, 1914
  - *Arhopala micale* Boisduval, 1853
    - *A. m. amytis* (Hewitson, 1862)
    - 'northern form'
  - *Arhopala wildei* Miskin, 1891
- **Tribe Ogyrini**
  - *Ogyris abrota* (Westwood, [1851])
  - *Ogyris oroetes* (Hewitson, 1862)
    - *O. o. oroetes* (Hewitson, 1862)
    - *O. o. apiculata* (Quick, 1972)
    - 'arid form'
  - *Ogyris olane* (Hewitson, 1862)
  - *Ogyris barnardi* (Miskin, 1890)
    - *O. b. barnardi* (Miskin, 1890)
    - *O. b. delphis* (Tindale, 1952)
  - *Ogyris amaryllis* (Hewitson, 1862)
    - *O. a. amaryllis* (Hewitson, 1862)
    - *O. a. amata* (Waterhouse, 1934)
    - *O. a. meridionalis* (Bethune-Baker, 1905)
    - *O. a. hewitsoni* (Waterhouse, 1902)
  - *Ogyris ianthis* (Waterhouse, 1900)
  - *Ogyris iphis* (Waterhouse & Lyell, 1914)
    - *O. i. iphis* (Waterhouse & Lyell, 1914)
    - *O. i. doddi* (Waterhouse & Lyell, 1914)
  - *Ogyris aenone* (Waterhouse, 1902)
  - *Ogyris genoveva* (Hewitson, [1853])
  - *Ogyris zosine* (Hewitson, [1853])
  - *Ogyris otanes* (C. Felder & R. Felder, 1865)
    - *O. o. otanes* (C. Felder & R. Felder, 1865)
    - *O. o. sublustris* Williams & Hay, 2001
    - *O. o. arcana* Williams & Hay, 2001
  - *Ogyris idmo* (Hewitson, 1862)
    - *O. i. idmo* (Hewitson, 1862)
    - *O. i. halmaturia* (Tepper, 1890)
  - *Ogyris subterrestris* Field, 1999
    - *O. s. subterrestris* Field, 1999
    - *O. s. petrina* Field, 1999
- **Tribe Zesiini**
  - *Jalmenus aridus* Graham & Moulds, 1988
  - *Jalmenus lithochroa* Waterhouse, 1903
  - *Jalmenus eichhorni* Staudinger, 1888
  - *Jalmenus ictinus* Hewitson, [1865]
  - *Jalmenus pseudictinus* Kerr & Macqueen, 1967
  - *Jalmenus daemeli* Semper, [1879]
  - *Jalmenus evagoras* (Donovan, 1805)
    - *J. e. evagoras* (Donovan, 1805)
    - *J. e. eubulus* Miskin, 1876
  - *Jalmenus clementi* H. H. Druce, 1902
  - *Jalmenus icilius* Hewitson, [1865]
  - *Jalmenus inous* Hewitson, [1865]
    - *J. i. inous* Hewitson, [1865]
    - *J. i. notocrucifer* Johnson, Hay & Bollam, 1992
  - *Pseudalmenus chlorinda* (Blanchard, [1848])
    - *P. c. chlorinda* (Blanchard, [1848])
    - *P. c. conara* Couchman, 1965
    - *P. c. zephyrus* Waterhouse & Lyell, 1914
    - *P. c. myrsilus* (Westwood, [1851])
    - *P. c. chloris* Waterhouse & Lyell, 1914
    - *P. c. barringtonensis* Waterhouse, 1928
- **Tribe Hypolycaenini**
  - *Hypolycaena phorbas* (Fabricius, 1793)
    - *H. p. phorbas* (Fabricius, 1793)
    - *H. p. ingura* Tindale, 1923
  - *Hypolycaena danis* (C. Felder & R. Felder, [1865])
- **Tribe Deudorigini**
  - *Deudorix epijarbas* (Moore, [1858])
  - *Deudorix diovis* Hewitson, [1863]
  - *Deudorix epirus* (C. Felder, 1860)
  - *Deudorix democles* (Miskin, 1884)
  - *Deudorix smilis* Hewitson, [1863]
  - *Rapala varuna* (Horsfield, [1829])
  - *Bindahara phocides* (Fabricius, 1793)

Subfamily Polyommatinae

- **Tribe Candalidini**
  - *Candalides helenita* (Semper, [1879])
  - *Candalides margarita* (Semper, [1879])
  - *Candalides gilberti* Waterhouse, 1903
  - *Candalides absimilis* (C. Felder, 1862)
    - 'eastern form'
    - 'northern form'
    - 'southern form'
  - *Candalides consimilis* Waterhouse, 1942
    - *C. c. consimilis* Waterhouse, 1942
    - *C. c. goodingi* Tindale, 1965
    - *C. c. toza* (Kerr, 1967)
  - *Candalides cyprotus* (Olliff, 1886)
    - *C. c. cyprotus* (Olliff, 1886)
    - *C. c. pallescens* (Tite, 1963)
  - *Candalides hyacinthina* (Semper, [1879])
    - *C. h. hyacinthina* (Semper, [1879])
    - *C. h. simplexa* (Tepper, 1882)
    - *C. h. gilesi* Williams & Bollam, 2001
  - *Candalides geminus* E.D. Edwards & Kerr, 1978
  - *Candalides erinus* (Fabricius, 1775)
  - *Candalides acasta* (Cox, 1873)

- *Candalides delospila* (Waterhouse, 1903)
- *Candalides xanthospilos* (Hübner, [1817])
- *Candalides heathi* (Cox, 1873)
  - *C. h. heathi* (Cox, 1873)
  - *C. h. alpina* Waterhouse, 1928
  - *C. h. doddi* Burns, [1948]
- *Candalides noelkeri* Braby & Douglas, 2004
- *Nesolycaena albosericea* (Miskin, 1891)
- *Nesolycaena medicea* Braby, 1996
- *Nesolycaena urumelia* (Tindale, 1922)
- *Nesolycaena caesia* d'Apice & Miller, 1992

Tribe Lycaenesthini

- *Anthene seltuttus* (Röber, 1886)
- *Anthene lycaenoides* (C. Felder, 1860)

Tribe Polyommatini

- *Petrelaea tombugensis* (Rober, [1886])
- *Nacaduba berenice* (Herrich-Schäffer, 1869)
- *Nacaduba kurava* (Moore, [1858])
  - *N. k. parma* Waterhouse & Lyell, 1914
  - *N. k. felsina* Waterhouse & Lyell, 1914
- *Nacaduba cyanea* (Cramer, [1775])
- *Nacaduba biocellata* (C.Felder & R. Felder, 1865)
- **Nacaduba pactolus* (C. Felder, 1860
- **Nacaduba calauria* (C. Felder, 1860)
- *Erysichton lineata* (Murray, 1874)
- *Erysichton palmyra* (C. Felder, 1860)
- *Danis danis* (Cramer, [1775])
  - *D. d. serapis* Miskin, 1891
  - *D. d. syrius* Miskin, 1890
- **Nothodanis schaeffera* (Eschscholtz, 1821)
- *Psychonotis caelius* (C. Felder, 1860)
- *Prosotas nora* (C. Felder, 1860)
- *Prosotas felderi* (Murray, 1874)
- *Prosotas dubiosa* (Semper, [1879])
- **Prosotas gracilis* (Röber, [1886])
- *Catopyrops ancyra* (C. Felder, 1860)
- *Catopyrops florinda* (Butler, 1877)
  - *C. p. halys* (Waterhouse, 1934)
  - *C. p. estrella* (Waterhouse & Lyell, 1914)
- *Ionolyce helicon* (C. Felder, 1860)
- *Theclinesthes onycha* (Hewitson, [1865])
  - *T. o. onycha* (Hewitson, [1865])
  - *T. o. capricornia* Sibatani & Grund, 1978
- *Theclinesthes miskini* (T.P. Lucas, 1889)
  - *T. m. miskini* (T.P. Lucas, 1889)
  - *T. m. eucalypti* Sibatani & Grund, 1978
  - *T. m. arnoldi* (Fruhstorfer, 1916)
- *Theclinesthes albocincta* (Waterhouse, 1903)
  - 'inland form'
  - 'southern coastal form'
  - 'eastern form'
- *Theclinesthes hesperia* Sibatani & Grund, 1978
  - *T. h. hesperia* Sibatani & Grund, 1978
  - *T. h. littoralis* Sibatani & Grund, 1978
- *Theclinesthes serpentata* (Herrich-Schäffer, 1869)
  - *T. s. serpentata* (Herrich-Schäffer, 1869)
  - *T. s. lavara* (Couchman, 1954)
- *Theclinesthes sulpitius* (Miskin, 1890)
- *Sahulana scintillata* (T.P. Lucas, 1889)
- *Neolucia agricola* (Westwood, [1851])
  - *N. a. agricola* (Westwood, [1851])
  - *N. a. insulana* Waterhouse & Lyell, 1914
  - *N. a. occidens* Waterhouse & Lyell, 1914
- *Neolucia hobartensis* (Miskin, 1890)
  - *N. h. hobartensis* (Miskin, 1890)
  - *N. h. monticola* Waterhouse & Lyell, 1914
- *Neolucia mathewi* (Miskin, 1890)
- *Jamides phaseli* (Mathew, 1889)
- *Jamides amarauge* H.H. Druce, 1891
- *Jamides cyta* (Boisduval, 1832)
- *Jamides aleuas* (C. Felder & R. Felder, 1865)
- **Jamides nemophila* (Butler, 1876)
- **Jamides bochus* (Stoll, [1782])
- *Catochrysops panormus* (C. Felder, 1860)
  - *C. p. platissa* (Herrich-Schäffer, 1869)
  - *C. p. papuana* Tite, 1959
- *Catochrysops amasea* Waterhouse & Lyell, 1914
- *Lampides boeticus* (Linnaeus, 1767)
- *Leptotes plinius* (Fabricius, 1793)
- *Zizeeria karsandra* (Moore, 1865)
- *Zizina labradus* (Godart, [1824])
  - *Z. l. labradus* (Godart, [1824])
  - *Z. l. labdalon* Waterhouse & Lyell, 1914
- **Zizina otis* (Fabricius, 1787)
- *Famegana alsulus* (Herrich-Schäffer, 1869)
- *Zizula hylax* (Fabricius, 1775)
- *Everes lacturnus* Godart, [1824]
- *Pithecops dionisius* (Boisduval, 1832)
- *Neopithecops lucifer* (Röber, 1886)
- *Megisba strongyle* (C. Felder, 1860)
- *Udara tenella* (Miskin, 1891)
- *Euchrysops cnejus* (Fabricius, 1798)
- *Freyeria putli* (Kollar, [1844])

Glossary

Adult – the fully grown, sexually mature insect. Also known as the imago.

Aestivate – to pass the summer in a dormant state.

Anal veins – the sixth set of wing veins (1A+2A) running parallel to the dorsum of the wing (Fig. 4).

Androconia – specialised wing scales in male Lepidoptera which disseminate scents (pheromones) secreted by associated glands; these scales may be scattered over the wings or form well-defined patches, brands, marks, tufts, brushes or hair-pencils. Also known as scent-hairs, sex-scales.

Antennae – long, paired, sensory organs arising from between the eyes of adults; comprising three segments, a thick basal segment, the scape, a second segment, the pedicel, and a long, third segment, the flagellum that consists of a shaft and a club (Fig. 1).

Anterior – situated at or to the front.

Apex, of wing – tip of the wing (Fig. 4).

Apical area – the area at or adjacent to the tip of a wing or other structure (Fig. 4).

Apical claw or claw – claw borne at the end of the tarsus (Fig. 3).

Apical spurs – spurs found on the apex of the tibia of the mid and hind legs.

Apiculus – the tapering apical portion of the antennal club in Hesperiidae (Fig. 2).

Base or basal area – the area at or adjacent to the base of the wing or other structure (Fig. 4).

Bifid – two pronged or forked.

Bifurcated – partly divided into two.

Cell or discal cell – that part of the wing enclosed by the basal sections of the radial and cubital veins and the discocellular veins (Fig. 4).

Chemoreceptor – a sense organ responsive to chemical stimuli.

Claw or apical claw – the terminal appendage on the tarsus (Fig. 3).

Cline – a gradient in which there is a gradual and continuous change in a character, or characters, over the geographic range of the species.

Club – the thickened or swollen apical end of the antenna (Fig. 2).

Costa – the anterior or leading margin of the wing, joining the base and the apex (Fig. 4).

Costal area – the area of the wing along or immediately adjacent to the costa (Fig. 4).

Costal vein – the first main wing vein running along and strengthening the costa (Fig. 4).

Coxa – the first or basal segment of the leg (Fig. 3).

Cremaster – constricted and fused anal segments of the pupa bearing long hooked setae which attach the pupa to a pad of silk spun by the larva.

Cremastral hooks – the hooked setae arising from the cremaster.

Crenulate – small regular indentations, scalloped.

Crepuscular – the habit or behaviour of being active at dusk.

Crypsis – concealment, aided by a combination of colour, structure and behaviour.

Cryptic – hidden by means of crypsis.

Cubital vein – the fifth main wing vein (Cu) usually forming the posterior margin of the discal cell and comprising the anterior branch (CuA) and the posterior branch (CuP), the latter being almost entirely lost in butterflies (Fig. 4). The basal portion of the vein is known as the cubitus.

Discal area – the central area of the wing (Fig. 4).

Discal cell or cell – that part of the wing enclosed by the basal sections of the radial and cubital veins and the discocellular veins (Fig. 4).

Discocellulars or discocellular veins – the short and weak transverse veins that form the distal margin of the cell in the wing (Fig. 4).

Dormancy – a period of inactivity.

Dorsal – upper surface or back.

Dorsal nectary organ – a glandular organ, situated middorsally on abdominal segment 7 in the larvae of most Lycaenidae.

Dorsolateral – situated midway between the dorsal and lateral surfaces.

Dorsolateral eversible organs – a pair of eversible tubular organs situated dorsolaterally on abdominal segment 8 in larvae of most Lycaenidae (on metathorax of Riodinidae).

Dorsum, of wings – the inner margin or trailing edge of the wing (Fig. 4).

Ecotone – a sensitive transition area between two adjacent habitats.

Endemic – that which is peculiar to a particular locality or region.

Epiphysis – a movable lobe on the fore tibia bearing a marginal comb, found in Hesperiidae and Papilionidae (Fig. 3).

Eversible organs – see Dorsolateral eversible organs.

Family – a taxonomic category comprising one or more closely related genera, tribes and subfamilies.

Femur – the third segment of the leg between the trochanter and the tibia (Fig. 3).

Flagellum – the long third segment of the adult antenna consisting of a shaft and terminal club.

Frenulum – a strong bristle-like structure arising from the base of the hind wing which fits into the retinaculum of the fore wing to hold the wings together in flight. Absent in butterflies with the exception of males of the Regent Skipper, *Euschemon rafflesia* (Fig. 5A).

Fringe or scale-fringe – projecting margin of wing scales, especially along the termen.

Genitalia – the reproductive organs used for either mating or oviposition.

Genus (**plural genera**) – a taxonomic group of closely related species.

Geographic variation – variation within a species in which geographically separated populations are distinctive.

Girdle – strands of silk that loop dorsally from the substrate around the centre of the pupa.

Ground colour – the dominant colour of the wing contrasted with that of the pattern.

Hair-pencil – a dense tuft of long, parallel, piliform hair-scales (often androconia) in the males of some species, displayed during courtship, which may disseminate pheromones.

Hilltopping – the mate-location behaviour exhibited by certain insects when they congregate on hilltops or other elevated points.

Humeral vein – a short additional vein arising near the base of the hind wing and running towards the base of the costa (Fig. 4).

Labial palps – paired appendages arising from the insect labium, three-segmented in butterflies.

Lateral – relating to the side.

Legs – paired appendages arising ventrally from the thorax, comprising five segments: coxa, trochanter, femur, tibia and tarsus (Fig. 3).

Marginal comb – the row of hairs or bristles on the epiphysis of the fore tibia used for cleaning the antennae and proboscis.

Median area – the central area of the wing between the base and the termen, extending from the costa to the dorsum (Fig. 4).

Median vein – the fourth main wing vein (M) (Fig. 4). In butterflies and most moths the basal half of this vein is lost.

Mesothorax – the middle segment of the thorax, bearing the mid legs and, in adults, the fore wings (Fig. 1).

Metamorphosis – the transformation from larval to adult form; referred to as ‘complete’ in those insects, including Lepidoptera, in which there is a non-feeding pupal stage.

Metapopulation – population of a species consisting of a number of small, localised subunits (colonies), usually over a large area relative to the area of each subunit, that are interconnected genetically by occasional dispersal events.

Metathorax – the third segment of the thorax, bearing the hind legs and, in adults, the hind wings (Fig. 1).

Migration – a movement, usually of many individuals, in one general direction at any one time.

Monophyly – all the members of a group of taxa that have descended from a common ancestor.

Morphology – the study of structure and form (in the sense of shape), not colour or function.

Myrmecophagous – of larvae, feeding exclusively on immature stages of ants.

Myrmecophilous – of larvae, associating with ants. Larvae with facultative type associations may or may not associate with ants, whereas those with obligate type associations always associate with ants.

Onisciform – shaped like a wood-louse or slater (e.g. lycaenid larvae).

Osmeterium – the forked eversible scent-producing organ arising from the anterior margin of the prothorax of larvae, in Papilionidae.

Palp (**plural palps**) – segmented appendage on the maxilla or labium, bearing sensilla.

Parasite – an organism that lives on or in the body of another species and from which it obtains its nutriment.

Pedicel, of antenna – the second segment of the antenna.

Phenology – the study of the influence of environmental (e.g. climatic) factors on the seasonal occurrence and behaviour of animals and plants.

Pheromone – a substance secreted by an individual that produces a particular response in other individuals of the same species; usually for attracting mates.

Polymorphism – the existence of two or more genetically different forms in the same interbreeding population but where the rarest form is too frequent to be maintained by mutation.

Polyphenism – seasonal variation due to varying environmental factors.

Posterior – situated at or towards the rear.

Postmedian area – the area of the wing just beyond the median area (Fig. 4).

Predator – an animal that preys on other animals for food.

Proboscis – the tubular organ used for sucking up liquid food. In adult Lepidoptera the coiled proboscis is formed from the paired galeae hooked together to form a tube.

Prothorax – the first segment of the thorax, bearing the fore legs and a pair of spiracles (Fig. 1).

Pupal cap – the anterior portion of the pupal cuticle covering the head of the future adult. Sometimes known as the operculum.

Pupal case – the empty pupal cuticle (exuvium) following emergence of the adult. Also known as the pupal shell or pupal skin.

Puparium – the hardened skin (modified cuticle) of the final instar larva enclosing the pupa.

Radial vein – the third main wing vein (R), usually with three to five branches in the fore wing but only two in the hind wing, R_1 and the radial sector (Rs) (Fig. 4).

Retinaculum – the hook beneath the fore wing into which the frenulum fits (Fig. 5A).

Riparian – living or situated on banks of rivers and streams.

Rugose – having a roughened surface.

Scales – flattened, highly modified hairs forming the characteristic clothing of Lepidoptera.

Scale-fringe or fringe – projecting marginal scales of the wing, along the termen.

Scape – the basal segment of the antenna.

Scent-hairs – see androconia.

Scent-pouches – marginal folds of the wing containing androconia.

Seasonal variation or polyphenism – variation due to factors that change with the season such as day length, temperature and rainfall.

Sedentary – settled or remaining in one place.

Segment – a ring-like or tubular subdivision of the body or of an appendage.

Seta (**plural setae**) – hair, arising from a socket on the cuticle.

Sex-brand, sex-mark – a patch of androconia on the male wing.

Sex-scales – see Androconia.

Shaft – the proximal part of the flagellum of the antenna between the pedicel and the club.

Spiracles – the lateral apertures of the tracheae or breathing tubes of insects (Fig. 1).

Spurs – movable spine-like structures, often clothed with scales, found on the mid and hind tibiae.

Sternum – the ventral sclerite of each body segment.

Stridulation – sound produced by rubbing a series of hard projections against a ribbed or file-like surface.

Subapical area – the area of the wing adjacent to the apical area (Fig. 4).

Subbasal area – the area of the wing adjacent to the base (Fig. 4).

Subcostal area – the area of the wing adjacent to the costa (Fig. 4).

Subcostal vein – the second main wing vein (Sc) of the wing terminating on the costa (Fig. 4).

Subdorsal – situated adjacent to the middorsal surface, between dorsal and dorsolateral surfaces.

Subfamily – the taxonomic rank below family containing genera more closely related to one another than to the other genera of the family.

Submedian area – the area of the wing between the subbasal and median areas (Fig. 4).

Subspecies or geographical race – a population of a species occupying a discrete geographic area that has become recognisably distinct from another population of the same species which occupies a separate geographic area.

Subterminal area – the area of the wing between the postmedian and terminal areas (Fig. 4).

Subtornal area – the area of the wing between the postmedian and tornal area (Fig. 4).

Superfamily – a group of closely related families.

Systematics - the scientific study of the evolutionary relationships of organisms.

Tail – an elongate posterior extension of the hind wing.

Tarsal or apical claws – claws at the end of the tarsus (Fig. 3).

Tarsus (**plural tarsi**) – the fifth or most distal segment of the leg, attached to the apex of the tibia (Fig. 3).

Taxon (plural taxa) – term used to denote any taxonomic category, such as subspecies, species, genus, etc.

Taxonomy – the scientific study of describing, naming and classifying animals and plants.

Termen – the outer margin of the wing joining the apex to the tornus (Fig. 4).

Terminal area – the area of the wing directly adjacent to the termen (Fig. 4).

Territoriality – behaviour in which the male patrols or perches to defend a particular area from other animals of the same or other species.

Tibia (**plural tibiae**) – the fourth segment of the leg, between the femur and the tarsus (Fig. 2).

Tornal area – the area of the wing immediately adjacent to the tornus (Fig. 4).

Tornal lobe – small roundish or pendulous extension or projection of the tornus of the hind wing.

Tornus – the outer angle of the wing between the termen and the dorsum (Fig. 4).

Trochanter – the small second segment of the leg, between the coxa and the femur (Fig. 3).

Veins – structural struts supporting and strengthening the wing, usually tubular and containing a trachea and/or haemolymph.

Venation – the arrangement of veins in the wing (Fig. 5).

Ventral – relating to the lower or under surface.

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Further information

Entomological societies, journals and newsletters

There are number of societies in Australia that not only hold regular meetings but also produce journals and newsletters.

- Australian Entomological Society produces a news bulletin (*Myrmecia*) and journal (*Australian Journal of Entomology*).
- Entomological Society of Queensland produces a news bulletin and journal (*The Australian Entomologist*).
- Butterfly and other Invertebrates Club (Brisbane) produces a newsletter.
- The Entomological Society of New South Wales.
- The Entomological Society of Victoria produces a news bulletin (*Victorian Entomologist*).
- Butterfly Conservation South Australia produces a newsletter.
- Western Australian Insect Study Society produces a newsletter.

Collecting and preserving butterflies

If you are interested to collect and preserve butterflies, you can download instructions from the CSIRO Publishing webpage for this book at: http://www.publish.csiro.au/pid/3948.htm

You can obtain the necessary equipment from Australian Entomological Supplies, PO Box 250, Bangalow, NSW 2479. Website: http://www.entosupplies.com.au

Butterfly collections

The Australian National Insect Collection (ANIC) at CSIRO Entomology in Canberra holds the world's largest collection of Australian insects, and there are also collections at all State Museums. Entomologists at the museums, departments of primary industry, or CSIRO Entomology are always willing to help interested people. There are several butterfly houses in Australia, including those at the Melbourne and Perth zoos, and the Australian Butterfly House at Kuranda in northern Queensland.